REPORT RESUMES

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THE JOB AND CAREER SATISFACTION OF MEN SCHOOL PRINCIPALS.
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FROM A NATIONAL CROSS-SECTION OF 382 MALE PRINCIPALS IN AMERICAN CITIES WITH A 1960-1961 POPULATION OF 50,000 OR OVER, INTERVIEW AND RELATED DATA WERE OBTAINED TO INVESTIGATE POSSIBLE DETERMINANTS OF IJS OR INTRINSIC JOB SATISFACTION (DEGREE OF GRATIFICATION DERIVED FROM PERFORMING MANAGERIAL TASKS) AND CS OR CAREER SATISFACTION (DEGREE OF GRATIFICATION DERIVED FROM HAVING CHOSEN EDUCATIONAL ADMINISTRATION AS A CAREER). EMPIRICAL FINDINGS OF THE IJS STUDY PROVIDED SUPPORT FOR 16 CORRELATIVE HYPOTHESES, BASED ON FOUR ASSUMPTIONS--(1) TWO MAJOR PREPOTENT PSYCHOLOGICAL NEEDS OF MANAGERIAL PERSONNEL ARE THE NEEDS FOR AUTONOMY AND FOR SELF-ACTUALIZATION, (2) IJS IS PRIMARILY A FUNCTION OF THE DEGREE TO WHICH MANAGERS ARE ABLE TO GRATIFY THESE NEEDS THROUGH THEIR ROLE PERFORMANCE, (3) ROLE PERFORMANCE CHARACTERIZED BY INDEPENDENCE OF ACTION, CREATIVITY, TASK ACCOMPLISHMENT, AND CONSISTENCY HAS SPECIAL IMPORTANCE FOR SATIATING THESE PSYCHOLOGICAL NEEDS, AND (4) FROM THESE ASSUMPTIONS IJS MAY BE REGARDED AS A FUNCTION OF CONDITIONS SERVING TO INCREASE OR DECREASE THE LIKELIHOOD THAT PRINCIPALS WILL EXHIBIT THESE KINDS OF ROLE PERFORMANCE. TWO CS HYPOTHESES RECEIVED EMPIRICAL SUPPORT, BASED ON THE ASSUMPTION THAT VARIATION IN CAREER SATISFACTION AMONG PRINCIPALS IS EXPLAINED BY THEIR DIFFERENTIAL GRATIFICATION WITH THE EXTRINSIC REWARDS OF THEIR POSITION. TWELVE CS HYPOTHESES RECEIVED EMPIRICAL SUPPORT, BASED ON THE ASSUMPTION THAT CAREER SATISFACTION IS EXPLAINED BY THE DIFFERENTIAL INTRINSIC REWARDS PRINCIPALS DERIVE FROM THEIR WORK. A RELATED DOCUMENT, EA 001 139, IS THE SIXTH PHASE OF THIS STUDY. (JK)

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THE JOB AND CAREER SATISFACTION OF MEN SCHOOL PRINCIPALS

Neal Gross and David A. Napior

Final Report

Cooperative Research Project No. 2536

Graduate School of Education
Harvard University

EA 001 115

June 1967

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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The research reported herein was performed under Contract No. 5-1053-2-12-1 with the Cooperative Research Branch, United States Office of Education, Department of Health, Education, and Welfare.

Preface

This is the fifth of a series of monographs that present the findings of the National Principalship Study, a research program in the sociology of education sponsored by Harvard University and supported by grants from the Cooperative Research Branch, U. S. Office of Education, Department of Health, Education, and Welfare. The research studies reported in the first four reports were performed under Contract SAE-8702 and the present investigation was carried out under Contract 5-1053-2-12-1.

This final report presents the findings of the Study that examined determinants of the intrinsic job satisfaction and career satisfaction of 382 men principals in 41 large city school systems in all regions of the United States. The first report of the Study focused on the effects and determinants of the professional leadership exhibited by elementary principals as the executives of their schools. The second one examined the backgrounds, careers, and performance of women and men as elementary school principals and the relationship of the sex of principals to the functioning of their schools. The third report dealt with the determinants and effects of selected dimensions of the principals' administrative performance, and the fourth one presented the findings that emerged from the study of role conflicts to which principals are exposed.

It would not have been possible to undertake the inquiry reported in these pages without the cooperation and collaboration of many individuals. First, we wish to acknowledge our indebtedness to members of the senior staff: Peter C. Dodd, Robert Dreeben, Robert E. Herriott, Joseph L. Hozid, Paul E. Kelly, Keith W. Prichard, Anne E. Trask, and Dean K. Whitla. In addition to participating in the design of the overall Study, they prepared research materials, supervised field work activities in many cities, and conducted most of the interviews. The senior staff also served as editors and coders (or supervisors of coding) for both the questionnaire and interview data. Robert Dreeben assumed major responsibility for coding the open-ended interview materials and Peter C. Dodd, Joseph L. Hozid, and Anne E. Trask worked closely with him in this activity. Robert E. Herriott coordinated the development of the many research instruments and supervised the extensive computer programming and data reduction required during the initial years of the Study. His advice on Guttman scaling procedures was an important contribution to the present study. Keith W. Prichard and Paul E. Kelly reviewed relevant bodies of social science and educational literature with considerable skill. Dean K. Whitla had primary responsibility for developing and carrying out the sampling procedures. He also served as Associate Director of the Study during the early years of the research program.

We express our appreciation to the following individuals who augmented the senior staff in the data collection phase of the Study: John Clark, James M. Coffee, Mario D. Fantini, Harold L. Hodgkinson, and Miriam Lieber.

The following individuals offered valuable services as research assistants during the earlier periods of the Study: Philip S. Bonacich, Hugh Cline, Nathan Gross, David Hill, George W. Perry, Nancy H. St. John,

and Norman A. Sprinthall.

We were advised on various statistical problems related to the overall design of the National Principalship Study by the following individuals: William G. Cochran, Robert E. Herriott, Howard Raiffa, John Tukey, and Dean K. Whitla. Their cooperation is acknowledged with considerable gratitude.

Richard Labrie and Charles Cantor of the Harvard Statistical Laboratory were also of considerable assistance in developing computer programs to facilitate the early data processing phase of the work. The statistical work presented in this report was performed at the Harvard Computing Center. For their valuable services to the data processing activities of the Study, we are also indebted to Walter O. Jewell, III, and Ralph G. Lewis.

Important clerical or computational tasks were performed by Frances Cleveland and Sandra J. Gross.

There are several other people who deserve special comment because of their contributions to the Study. Donald J. Blyth, Nathan Jacobson, and David C. McClelland were extremely generous in sharing their wisdom with us about a number of problems examined in the research. Herold C. Hunt and Robert H. Anderson also stimulated our thinking about many issues in educational administration.

Marion L. Crowley served as the secretary of the Study, and we are indebted to her for her invaluable contributions to this report, which included typing and assembling the final manuscript. Theresa Kovich and Alice Harrington ably carried out their secretarial and related responsibilities.

Three hundred and eighty-two principals in 41 large American cities participated in the inquiry reported in these pages. Without the cooperation of these educators and the endorsement and support of the National Principalship Study by their school administrations and school boards, it would not have been possible to carry out the research program. We are greatly appreciative of their interest in the Study and the time and effort they devoted to it. We hope the research findings presented in this report of the Study will constitute some repayment for their cooperation.

Finally, we wish to express our special appreication to Joseph B. Giacquinta and Eigil D. Pedersen for their valuable research assistance during the initial phase of this inquiry. Their ideas and efforts influenced the design of the study and the analysis of data in many important ways.

Despite all the help received, however, we alone, of course, are responsible for the limitations of this monograph.

Neal Gross

David A. Napior

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Chapter 1: Introduction to the Study

This report presents the findings of an investigation conducted as part of the National Principalship Study that focused on two dimensions of principals' satisfaction with their administrative positions. The first is the degree of gratification they derive from performing their managerial tasks and we shall refer to this phenomenon as their intrinsic job satisfaction. The second is the degree of gratification they derive from having chosen educational administration as a career; we shall refer to this variable as their career satisfaction. The basic objectives of the inquiry were to investigate possible determinants of the variation in the intrinsic job satisfaction and the career satisfaction of men who serve in the same administrative capacity in school systems. More specifically, we were interested in isolating circumstances in the work environments of principals and their personal characteristics that might account for the variation in the gratification they derive from performing their managerial duties and from their selection of educational administration as a career.

The problems to be examined interested us as social scientists for two basic reasons. First, most studies of job satisfaction have focused on non-supervisory personnel and little attention has been directed to the satisfaction managers of organizations derive from the performance of their tasks or from their careers. Previous studies of teachers[1] and industrial workers[2] have shown that the way their superiors relate to them have a bearing on their reactions to their work. Although school principals are the formal leaders of their organizations, at the same time they are subordinate to individuals who are their administrative superiors. What impact, if any, does the performance of these officials have on the degree of satisfaction principals derive from their work and careers? Is the amount of autonomy principals are given by the higher administration of school systems related to their job and career satisfaction? And what about conditions such as the degree of role ambiguity and the adequacy of communications principals encounter in their relationships with their administrative superiors? Do they influence the reactions of principals to their work?

Our knowledge is also limited about the possible impact of the behavior and attitudes of teachers and the principals' own personal characteristics on their reactions to their occupational roles. We hoped to contribute to our meager understanding of the determinants of the job and career satisfaction of individuals responsible for the overall operation of sub-units of complex organizations such as school systems.

Second, as Herzberg and his associates[3] have noted, most studies designed to shed light on possible determinants of satisfaction with work have not been based on a theoretical analysis of the problem, but have been content to examine whether one or more independent variables that have been selected on a common-sense or *ad hoc* basis are correlated with it. We wanted to test a series of hypotheses about determinants of intrinsic job satisfaction (IJS) that were based on a single theoretical formulation involving a minimum set of concepts and assumptions.

We thought that a promising theoretical approach to this problem, one that had too readily been discarded in discussions [4] of possible explanations of the determinants of intrinsic job satisfaction, was to view it as a function of conditions that would serve to enhance or diminish the likelihood of individuals satiating their prepotent psychological needs. Psychologists have long maintained that the degree of gratification men derive from their conduct, whether at work or play, can be attributed to the extent to which it permits them to fulfill their basic wants or needs. However, apparently because there has been little agreement among psychologists about the number or primacy of these needs, little effort has been directed to examining the utility of a "basic needs" theoretical explanation for generating hypotheses to account for variation in gratification with work.

In reviewing the literature on the psychological needs of managerial personnel, however, we were impressed with Porter's findings[5] about the apparent saliency for executives at all levels in different organizational settings of two psychological needs. His studies, based on Maslow's theoretical ideas,[6] revealed that the major prepotent needs of organizational executives are the needs for autonomy and for self-actualization. If these needs were also prepotent for principals as managers of their organizations, then we reasoned that variation in their intrinsic job satisfaction might be explained by the differential ability of school administrators to gratify them in their work. We were interested in determining the utility of such a needs gratification explanation of intrinsic job satisfaction; the hypotheses we shall test about its determinants are based on this theoretical orientation.

With respect to the principals' gratification with their selection of educational administration as a career, we shall test a number of hypotheses about its possible determinants. Each is based on one or the other of two theoretical stances to the problem. The first is based on the premise that the explanation of the variation in the career satisfaction of principals may be attributed to their relative gratification with the extrinsic rewards of their jobs; the second attributes the explanation to their relative gratification with its intrinsic rewards or to their intrinsic job satisfaction. In short, in contrast to most previous inquiries, the analyses to be presented will be based on consistent theoretical frameworks for the empirical study of circumstances that may lead to job or career satisfaction. In consequence, in addition to finding out if particular hypotheses receive support, we shall also be able to explore the heuristic utility of the theoretical formulations underlying them.

There were practical reasons, too, for our interest in conducting this investigation. We wanted to put to the empirical test a number of ideas we have heard educators express about correlates of the intrinsic job satisfaction administrators derive from their work. Examples of such presumed determinants are the extent of a principal's teaching experience or graduate training. We also were curious about what impact, if any, personal characteristics such as age, religion, and race might have on the intrinsic job satisfaction of school administrators. In addition, we were interested in ascertaining if principals who administer schools of different size or with varying student body characteristics vary in the gratification they derived from their work. In this connection, we shall inquire whether principals who administer elementary, junior high, or senior high schools or schools located in different socio-economic areas of cities vary in their job satisfaction. Although there is considerable speculation about these issues among teachers, principals and higher administrators, empirical evidence about them is lacking, and the National Principalship Study included data that permitted us to examine them.

Specifications of the Study

The two major dependent variables of the study are the intrinsic job satisfaction and the career satisfaction of principals, and we shall test a number of hypotheses about circumstances that may be associated with these phenomena. Several specifications of the research design of this inquiry of the National Principalship Study deserve to be made explicit at the outset.

The first is that our inquiry will deal with the intrinsic job and career satisfaction of *men* school principals. There were two reasons for this delimitation of the study, even though we had data on both men and women principals. The first was theoretical in nature. The basic premises underlying the hypotheses to be tested about correlates of intrinsic job satisfaction (IJS) of principals involve assumptions about the prepotent psychological needs of executives, which as noted, were based on Porter's findings.[7] His inquiries were restricted to male executives and thus his data provide no justification for making assumptions about the prepotent needs of women who manage organizations. In view of this circumstance, we felt it appropriate to test hypotheses based on assumptions about the salient psychological needs of men as executives with data obtained only from men principals, rather than from administrators of both sexes. For the hypotheses we proposed to test about correlates of career satisfaction, they, too, were based on assumptions that we felt were more appropriate to apply to men than to women school administrators.

The second reason was that in a previous report of the National Principalship Study[8] we had examined in detail the reactions of men and women elementary principals to a number of aspects of their work.

A second specification of the study, to be considered in greater detail in Chapter 3, is that it deals with men principals in large communities, cities of 50,000 or more in size of population during the 1960-61 school year. This specification served to eliminate from the study principals who had teaching responsibilities. It also means that the findings of the study cannot be legitimately applied to principals who work in school systems located in smaller communities.

The third specification refers to the source of data we used to measure the independent and dependent variables. In the case of the dependent variables, intrinsic job satisfaction and career satisfaction, there was no other logical choice than to use principals' data as measures of these phenomena. They both refer to subjective states of mind or to feelings about task performance or educational administration as a career, and the most appropriate source of such data is from the individuals whose reactions to their work are under examination.

The measurement of other variables, for example, role ambiguity or the quality of teachers' classroom performance, however, is another matter. In a survey research type of study such as we conducted, variables of these kinds can be measured with data obtained from the principals, their higher administrators or teachers. Our decisions in this regard were dictated primarily by theoretical considerations. That is, although measurements of role ambiguity between a principal and higher administrators or quality of the classroom performance of teachers could be based on the responses of one or more categories of respondents, we chose to use the principals' responses as our source of data because the theoretical formulation and hypotheses had reference to the way the principals' perceptions of their organizational environments (and themselves) would serve to set in motion forces that would influence their satisfaction with work or career.

The final specification deals with the theoretical formulations we shall use. They, like any theoretical scheme, take into account only some of the many conditions that could have an impact on the phenomena we are attempting to explain. Our theoretical efforts make use of the method of abstraction and are based on a limited set of assumptions that we thought had special relevance for accounting for variation in IJS or CS. There are certainly other assumptions than those we have made that could be used in efforts to explain these phenomena. They would, of course, result in different explanations of IJS or CS than the ones we shall examine and they would undoubtedly shed further light on circumstances influencing the dependent variables of the study. Our interest, however, was to find out how heuristic the theoretical formulations we proposed were in generating hypotheses that received empirical support. And we assume, as Homans has observed, ". . . that a theory may be true, and yet not be the whole truth."[9]

Organization of the Report

Part I of the report focuses on the intrinsic job satisfaction investigation. In Chapter 2 we present the theoretical formulation within which the hypotheses to be tested about determinants of intrinsic job satisfaction (IJS) were developed. Chapter 3 presents the methods used to secure and analyze the data of both the study of IJS and of career satisfaction (CS). In addition, we shall describe the procedures we used to measure the IJS of the school principals.

Chapter 4 examines whether a series of variables not included in the hypotheses based on our theoretical formulation of IJS are associated with it. They include circumstances descriptive of the principal's school, his formal academic training, his career line, and other personal characteristics.

In Chapter 5, we present and test hypotheses about characteristics of a principal's relations with the higher administration that our theoretical formulation led us to anticipate would be related to his IJS. The hypotheses in Chapter 6 focus on the principal's perceptions of his teachers' characteristics and their influence on intrinsic job satisfaction. In Chapter 7 we test hypotheses about personal attributes of principals or their role performance that may be associated with IJS.

Part II of the report (Chapters 8, 9, and 10) deals with the career satisfaction of principals. In Chapter 8, we present the two theoretical formulations used in the study of determinants of CS and state the hypotheses to be tested that are based on an extrinsic rewards gratification theory of career satisfaction. We also describe the procedures used to measure CS and the method we shall employ to test the reasoning underlying hypotheses that receive empirical support. In Chapter 9 we test hypotheses about determinants of CS based on the extrinsic rewards gratification theory. In Chapter 10, we test hypotheses derived from an intrinsic rewards explanation of CS.

In Chapter 11, we present a summary of the findings and the major conclusions of the study.

Notes and References for Chapter One

1. For studies showing the influence of superordinates on teachers job satisfaction, see H. Harap, "Morale" *Nation's Schools*, 63 (1959) pp. 55-57; E. Reinhardt and E. K. Lawson, "Experienced Teachers View Their Schools," *Educational Administration and Supervision*, 45 (1959), pp. 147-152; National Educational Association," Attitudes and Morale," *N.E.A. Research Bulletin*, XXIII (1945) pp. 98-114; Francis S. Chase, *Factors for Satisfaction in Teaching*, Ph.D. dissertation, University of Chicago, 1951; P. D. Shilland, "A Teachers' Morale Survey," *Educational Forum*, 13 (1949) p. 480.

2. A review of the literature and an extensive list of references on the relationship between supervision and job attitudes in industry, see Frederick Herzberg, *et*. *al*., *Job Attitudes*: *Review of Research and Opinion* (Pittsburgh: Psychological Service of Pittsburgh, 1957).

3. Frederick Herzberg, Bernard Mausner, and Barbara B. Snyderman, *The Motivation to Work* (New York: John Wiley and Sons, 1959), pp. 8-10.

4. See for example, Nancy C. Morse, *Satisfactions in the White-Collar Job* (Ann Arbor: University of Michigan Press, 1953), Chapter 2.

5. Lyman W. Porter, "Job Attitudes in Management: I. Perceived Importance of Needs as a Function of Job Level," *Journal of Applied Psychology*, 46 (1962), pp. 375-384 and II. Perceived Importance of Needs as a Function of Job Level," *Journal of Applied Psychology*, 47 (1963), pp. 141-148.

6. A. H. Maslow, *Motivation and Personality*, (New York: Harper, 1954).

7. Porter, *op*. *cit*.

8. Neal Gross and Anne E. Trask, *Men and Women as Elementary School Principals*, Final Report No. 2, Cooperative Research Project No. 853, June 1964.

9. George Homans, The Human Group (New York: Harcourt Brace and Company, 1950), p. 14.

Chapter 2: The Intrinsic Job Satisfaction of School Principals: The Theoretical Formulation

The first objective of our study is to contribute to an understanding of factors that influence the intrinsic job satisfaction (IJS) of managerial personnel such as school principals. The theoretical formulation of the study and the hypotheses we shall test in our effort to account for variation in the IJS of principals makes use of the psychological concept of prepotent psychological needs and of the sociological concepts of role analysis.

We shall first consider these concepts that influenced the theoretical orientation of the study. Then we shall present the specific assumptions and reasoning from which the hypotheses to be tested in later chapters emerged.

Basic Concepts

Prepotent Psychological Needs

Our theoretical orientation to the determinants of IJS of managerial personnel was heavily influenced by a basic premise of most personality theories: that man has basic needs or motives that he attempts to satisfy through his actions.[1] Needs or motives are viewed as dispositions to attain a particular objective or goal-state.[2] "The aim of a particular motive is a particular kind of *effect* to be brought about through some kind of action. The aim of a motive defines the *kind* of satisfaction that is sought, e.g., pride in accomplishment, a positive objective relationship with another person, a sense of being in control of the means of influencing the behavior of other persons."[3] When an individual attains a goal-state he derives feeling of satisfaction whereas non-attainment or disruption of activity directed to it leads to feelings of dissatisfaction.

Although there appears to be little agreement among psychologists on the number of basic needs or motives of men,[4] some of them hold the view that there is a hierarchy of personality needs. Maslow,[5] for example, maintains that there is a specific sequence or the development of an individual's needs from lower order to higher order needs. At the lowest level are physiological needs such as hunger and thirst; next come safety needs and these are followed by needs for love and belongingness. At the next higher level are needs for esteem such as prestige and self-respect and at the top of the list is the need for self-actualization or the desire for self-fulfillment.

Maslow contends that a lower order need must be gratified before the next higher need can emerge in a person's development. He further argues that after a person has moved from a lower to a higher level of needs, the higher-level need assumes a more important position in his total system of needs and the lower-level needs assume less salience since they have been adequately satiated. Although lower level needs may at times increase in importance as a consequence of their lack of fulfillment, the individual, as a consequence of his going through stages of psychological development, tends to develop a "personality structure" in which his various needs form a hierarchical system. Needs which are at the top of an individual's hierarchy are assumed to be prepotent for him and they are the ones which he is primarily concerned with gratifying.[6]

These psychological ideas influenced the development of our theoretical formulation of IJS because they led us to conceive of managerial personnel as individuals who are striving to satiate prepotent psychological needs. They also led us to review the literature for evidence bearing on the salient needs of organizational executives. The assumptions we shall make about the prepotent needs of principals are based on Porter's findings[7] about the importance managerial personnel attribute to different motives.

Role Concepts

Our efforts to account for variation in the degree of intrinsic job satisfaction principals derive from performing their managerial tasks was also influenced by the sociological perspective of role analysis. Our conceptualization of the behavior of principals draws heavily on a language for role analysis presented in the volume, Explorations in Role Analysis.[8] The conceptual scheme we shall use employs the following concepts: position, expectations, role, and role behavior.

We use the term, position, to refer to the location of an actor or class of actors in a system of social relationships. In school systems, a number of clearly differentiated positions can be identified, for example, superintendent, assistant superintendent, principal, teacher, pupil, and so on.

A position is always part of a network of positions. The principalship, for example, belongs to a network containing positions such as higher administrators, teachers, parents, and students. The position of a principal, then, has meaning only in the context of the larger network of which his own is a part. As stated elsewhere, "whatever the implications of the label, a position cannot be completely described until all the other positions to which it is related have been specified."[9] For our study, as in most other investigations, however, it is only possible to examine empirically one or a few linkages among all positions in a social system.[10]

The concept of position has reference only to the location in a system of social relationships itself and not to the rights, duties, and obligations applied to its incumbent; nor does the term inform us about the performance of its incumbents. Concepts, therefore, are required to refer to both of these phenomena.

When attention is directed to how individuals should behave, the focus is on expectations. We define an expectation as an evaluative standard applied to an incumbent of a position. Such standards involve two dimensions: direction and intensity. If we ask a person to tell us whether an occupant of a position should engage in a specified activity, he may respond that he should or that he should not. Furthermore, a person who feels he should perform the behavior may say he absolutely must or preferably should perform it. In short, expectations may be positive or negative and can be distinguished according to their degree of obligation or mandatoriness.

We have presented our definitions of the concepts of position and expectation. Our definition of role is based on these two concepts: a role is a set of expectations, or in terms of our definition of expectations, a set of evaluative standards applied to an incumbent of a particular position. It deserves emphasis that this definition places no restrictions on who the definer of the expectations is. He may be the incumbent of the particular position being studied (the focal position), an occupant of a position in its role network (a counter position), or any person an investigator specifies. In the case of the principalship we can speak of the role definitions of its incumbents (principals), those of incumbents of counter positions (for example, teachers, higher administrators), or individuals not involved directly in the principal's network (for example, formal leaders of community or governmental agencies).

In addition, our formulation contains no assumption that there is consensus among role definers.[11] This aspect of our conceptualization is important for our study because it allows us to study the principals' perceptions of the degree of consensus that exists on the expectations for their performance.

We also need concepts to distinguish the expectations held for a position incumbent from his conduct in that capacity. In this study, we shall designate the behavior of an incumbent of a position as his role performance.

These concepts had a number of implications for our study. They led us to speculate how the network of positions within which principals operate might influence their IJS. Individuals who serve as principals are part of a division of labor and an authority structure which link them to other members of the organization, for example, higher administrators. The administrative superiors of school principals include superintendents, deputy and associate superintendents, assistant and district superintendents. How might these members of a principal's role network influence his reactions to his managerial tasks?

One way we thought they might influence his gratification with work was through the impact their role performance might have on his own. A principal is dependent on his administrative superiors in many important respects. For example, some of the problems he must cope with have system-wide implications and decisions about them are the prerogatives of his superordinates. They can procrastinate or act immediately in making these decisions. The principal requires information that only his bosses can provide, but he may find it relatively easy or difficult to obtain it. He at times may require the sympathetic support and understanding of his superiors in his efforts to cope with competing demands from his staff and parents. Higher administrators vary as to their willingness to offer such support and understanding to their principals.

A principal's reaction to his work could be affected by the performance of other members of his role network, for example, his teachers. If, for example, they carried out their duties in a perfunctory manner, this could have implications for his role performance. If his teachers did not cooperate with each other, he might have to accommodate his behavior to this condition. In short, it seemed reasonable to assume that how his superiors and subordinates performed their tasks would have consequences for his role performance, and hence his reactions to his work.

In exploring possible conditions that might account for variation in the intrinsic job satisfaction of principals, role analysis also points to the utility of ascertaining how members of their role network define their tasks. For example, the administrative superiors of a principal could expect him to adhere rigidly to a set of school system regulations or grant him wide latitude in his decision-making. The concept of expectations draws our attention to the degree of clarity that exists over the respective rights and obligations of principals and their superiors. Thus, some principals may be exposed to considerable ambiguity over their rights and obligations whereas others may not be confronted with this condition.

The concept of expectations also led us to speculate about the implications of the idea that principals may vary in the degree to which they can put in practice their own expectations for their role performance. One might anticipate that the extent to which principals are able to conform to their own definitions of their role would have a bearing on intrinsic gratification with their work.

In short, the language of role analysis raised many questions about social system forces that could bear on a principal's intrinsic job satisfaction.

A Theory of IJS with Reference to Managerial Personnel

The concepts and ideas we have considered to this point were central in our thinking as we set about the task of attempting to develop a theoretical formulation, based on a minimum set of assumptions, from which hypotheses could be derived about circumstances associated with the IJS of principals.

It seemed to make good sense to assume that managerial personnel such as school principals are individuals attempting to gratify prepotent psychological needs in their work and that conditions that could influence their role performance could also exert an impact on their intrinsic job satisfaction. The basic theoretical task confronting us was how to join these ideas into a single theoretical formulation of IJS. We now turn to our attempt to accomplish this task.

We define the intrinsic job satisfaction of managers as the gratification they derive from performing their occupational duties. What accounts for variation in IJS among individuals who serve in the same managerial capacity?

The explanation we propose in answer to this question begins with the premise that managerial personnel are individuals who are striving to satiate their prepotent psychological needs. That is, following Maslow, we assume that they have been able to satisfy "lower" order needs and that they are primarily concerned with the gratification of "higher" level needs that are of primary salience to them. This raises the question, "What needs could be assumed to be of greatest salience to managerial personnel?" The assumptions we made about prepotent psychological needs of managerial personnel were based on the findings of studies conducted by Porter.[12] His data revealed that managerial personnel are primarily concerned with satiating two types of prepotent needs: self-actualization needs and autonomy needs. Self-actualization needs refer to needs for personal growth and development, the realization of one's own potentialities, and feelings of worthwhile accomplishment. The need for autonomy has reference to the need of managers for independent thought and action in their role performance. Porter's findings emerged from a study of over 1,900 managers and executives in various types of organizational settings. He presented them with a list of 13 items reflecting Maslow's system of classifying needs according to their prepotency of elicitation. For each of the items the respondents were asked to respond on a seven point scale to "How important is this to me?" The findings revealed that for all management levels and all age groups, the category, need for self-actualization, ranked first and for 19 of the 20 sub-groups studied, the category, need for autonomy, ranked second. In concluding his study, Porter observes:

> "A final implication, based on both the results of the present study and on previously reported results, is that since Self-Actualization and Autonomy needs are seen by all management levels as the most important and least fulfilled types of needs, they are probably the most critical psychological need areas for organizations to consider in their relations with their managers and executives.[13]

On the basis of Porter's findings, we therefore made the assumption that the prepotent psychological needs of managerial personnel are the needs for self-actualization and autonomy.

Our second assumption is that IJS of managers is primarily a function of the degree to which they are able to gratify their prepotent psychological needs in their role performance: the more they can gratify their needs for autonomy and self-actualization in their role performance the greater their intrinsic job satisfaction.

Our third assumption is that among the many aspects of a manager's role performance that might have a bearing on the degree to which he could fulfill his prepotent psychological needs, the extent to which it was characterized by four attributes would have special importance for satiating his needs for autonomy and self-actualization. The first one has special significance with reference to his need for autonomy: independence in decision-making. We assume that the more the role performance of a manager is characterized by freedom of action in his decisions the greater he will be able to gratify his need for autonomy. The second attribute is task performance characterized by creativity. We assume that the more a manager exhibits imaginative and innovative approaches in dealing with organizational problems, the more he will be able to fulfill his need for expression of his unique capabilities. The third attribute is role performance characterized by accomplishment of major managerial responsibilities. We assume that the more success a manager experienced in carrying out his major tasks, the greater the likelihood that he would fulfill his need for feelings of worthwhile accomplishment. The fourth characteristic is consistency of role performance. We assume that erratic and inconsistent patterns of behavior would serve to diminish his chances of fulfilling his need for personal growth and development.

To this point we have made three major assumptions. The first is that managerial personnel have two major kinds of prepotent psychological needs they attempt to gratify in their work: the need for autonomy and for self-actualization. The second is that IJS is primarily a function of the degree to which they are able to gratify these needs through their role performance. The third is that four aspects of their role performance have special importance for satiating these salient psychological needs: the degree to which it is characterized by independence in decision-making, creativity in task performance, task accomplishment, and consistency.

If these assumptions are tenable, it follows that IJS will be a function in part of conditions that will serve to increase or decrease the likelihood that managerial personnel will exhibit role performance characterized by independence of action, creativity, task accomplishment, and consistency. In Chapters 5, 6 and 7 we shall test a number of hypotheses about possible determinants of IJS that emerge from this theoretical approach to the problem.

Notes and References for Chapter Two

1. See Calvin S. Hall and Gardner Lindzey, *Theories of Personality* (New York: John Wiley and Sons, 1957), Chapter XIV.

2. H. A. Murray, *et. al.*, *Explorations in Personality* (New York: Oxford University Press, 1938).

3. John W. Atkinson, "Thematic Apperceptive Measurement of Motives Within the Context of a Theory of Motivation," in John W. Atkinson (Editor), *Motives in Fantasy, Action, and Society* (Princeton: D. Van Nostrand Company, Inc., 1958), p. 597.

4. Hall and Lindzey, *op. cit.*, Chapter XIV.

5. A. H. Maslow, *Motivation and Personality* (New York: Harper, 1954).

6. Ibid.

7. Lyman W. Porter, "Job Attitudes in Management: II. Perceived Importance of Needs as a Function of Job Level," *Journal of Applied Psychology*, 47 (1963), pp. 141-148.

8. Neal Gross, Ward S. Mason and Alexander W. McEachern, *Explorations in Role Analysis: Studies of the School Superintendency Role* (New York: John Wiley and Sons, 1958), Chapter IV.

9. Ibid., p. 51.

10. Ibid., p. 53.

11. Ibid., Chapter III.

12. Porter, *op. cit.*

13. Porter, *op. cit.*, p. 148.

Chapter 3: Research Procedures[1]

This chapter presents the research methods used to secure and analyze the data examined in our investigation of the intrinsic job satisfaction and the career satisfaction of school principals. Since they were obtained and analyzed as a part of a larger research program, many of the methodological issues were resolved in the manner most compatible with the several objectives of the entire National Principalship Study. Therefore, we shall first describe research activities and decisions relevant at once to the present and all the other inquiries. These include staff activities in the planning stage of the study, the population and sampling procedures, methods of collecting data and techniques used in their processing and analysis. We then present the way we measured the intrinsic job satisfaction of school principals and report decisions of special relevance to the analysis and presentation of the data of the IJS inquiry. In Chapter 8, we shall describe how we measured the principal's career satisfaction and how we dealt with methodological issues of special pertinence to the CS investigation.

Preliminary Research Activities

Prior to the initiation of field work, the staff of the National Principalship Study engaged in many preliminary activities related to the several investigations of the Study. They specified the central independent and dependent variables of the several inquiries; they reviewed the relevant literature on the development of the public school principalship from the position of "principal teacher" to supervising principal and educational and social science publications dealing with this occupational role.

As the research designs of most of the investigations of the National Principalship Study began to take shape, the staff initiated work on the instruments needed to measure the key variables. A number of first drafts of instruments were developed to measure such central concepts as "role conflict," "role orientation," and "level of aspiration." Members of a graduate seminar at Harvard University pre-tested research instruments by interviewing 75 principals of schools located in the Greater Boston metropolitan area, and several graduate students, school principals on leave, gave considerable time to the pre-testing and review of our preliminary materials.

After the full array of instruments and interview schedules was developed a final pre-test was made on eight principals from the Greater Boston and New York areas who were invited to our Cambridge headquarters for a day. Each was interviewed for approximately eight hours, and a record kept as to the length of time it took him to complete each section of the schedule. After the interview the subjects and the interviewers met in small groups to discuss the day's proceedings. This pre-test procedure had important consequences upon the Study, resulting as it did, in major modifications in the interview schedule and in the techniques of data collection. It also served as a trial run for the field work staff that later conducted interviews and supervised field operations in all regions of the nation.

It became apparent from the original eight-hour pre-test interview that an additional four hours would be required to obtain all the data desired. Therefore, it was decided to obtain the data from the principals through three separate procedures. The first was a four-hour Personal and School Background Questionnaire to be filled out by the principal in his home community. The second was a four-hour Role Questionnaire filled out by him at a group session with other principals in his city. The third consisted of a Personal Interview with each principal individually, requiring approximately four hours. Procedures employed in obtaining data from the principals will be described later in this chapter. During this initial phase of the Study the target population was selected and the sampling procedure determined.

The Population and Sample

The target population of school principals for the National Principalship Study was all supervising principals in cities of 50,000 or more during the 1960-61 school year. The first reason for limiting the sample to large cities was because we wanted to exclude from the Study all principals who had any teaching responsibilities. Since there was no accurate way to identify them in all communities in the United States, the smaller communities, where this situation is most frequently found, were eliminated.

The second consideration was financial. In order to obtain a national sample and yet keep within the available funds, it was necessary to obtain a multiple of seven principals in each city to be visited. School systems in cities with population less than 50,000 frequently have fewer than seven schools.

In selecting the sample of school personnel the latest available data were used. The 10,956 principalships in cities with populations of 50,000 or over listed in the 1955-56 Biennial Census of the U. S. Office of Education were stratified on the basis of geographical region, system-per-pupil expenditure, and size of city. By the use of a cluster sampling procedure designed to obtain a 5 per cent sample of the population, 508 principals in 41 cities were selected. The Director or Associate Director of the Study held long-distance telephone conversations with the local superintendents to explain the objectives of the Study and to work out a time schedule for each school system's participation in it. All but two of the school superintendents readily agreed to give every possible sort of cooperation to the Study, but after the Director had gone to see them these two, also, pledged their full cooperation.

In the first phase of the sampling procedure it was determined how many principals in each of the 41 cities would be studied. To select the actual sample the schools in each community were classified according as they were elementary, junior high, or senior high and again by the socio-economic characteristic of their student bodies (high, medium, or low), as estimated by the superintendent of schools. This ensured a sample of schools which varied both as to level and the socio-economic status of their populations. All teaching principals and principals supervising more than one building were excluded from the sample.

Data Collection

The collection of data from principals was divided into three phases: in the first, each of the 508 principals in the sample was mailed a personal letter notifying him of his selection, explaining the aims and design of the Study and requesting that he provide information about his personal characteristics (e.g., age, sex, marital status), his family background (e.g., father's occupation, community of origin), his school (e.g., size of school population, characteristics of teachers), and his job history. The Study's confidentiality and anonymity were made clear. Then each principal was asked to complete the Personal and School Background Questionnaire at his convenience and bring it to a luncheon meeting to be held with principals in his city later that month.

During the fall of 1960 each of the 41 cities selected through the sampling procedure was visited by members of the Study staff for approximately five days. As a rule, the staff would arrive on Sunday evening and set up headquarters in a downtown hotel. On Monday morning the field-work director would contact the superintendent of schools or his representative, review with him the week's planned activities and answer his questions.

On Monday a luncheon was held for the superintendent of schools, his chief administrative aides, the principals selected to participate in the Study and members of the Study staff. At that time, the latter explained the full nature of the Study and emphasized again that replies to questions would be treated anonymously and tabulated only in combination with the responses of other principals. Questions they raised about the Background Questionnaire or other phases of the Study were answered at this session. After the luncheon, the superintendent of schools and his aides were excused and the Role Questionnaire was distributed to the principals.

This questionnaire contained 10 sections and required approximately four hours to complete. It focused on a large number of areas: the principal's attitudes and values, his definition of his role, his satisfactions and dissatisfactions, and his aspirations. In addition, each principal was asked to serve as an observer of both his administrative superiors and his teachers and to report on their behavior toward him. Members of the Study staff who were in the room during this four-hour period were ready to answer the principals' questions about the research instruments they were completing.

The third phase took place during the latter part of the week in which the luncheon meeting was held. It consisted of a three- to five-hour personal interview with each principal, usually in a private room at the headquarters, during which the research materials from the Background Questionnaire and the Role Questionnaire were reviewed. The principal was then asked questions which could best be dealt with personally: questions about his sources of strength and weakness, his motives in becoming a principal, the obstacles confronting him in his efforts to do a better job, and so on.

The total time of questioning the principals during the three phases averaged about 12 hours. Only seven of the 508 principals selected in the sample failed to participate in (or to complete) all three. The other 501 made up the research sample of the National Principalship Study.[2]

Processing and Reduction of Data

The Background Questionnaire and the Role Questionnaire were pre-coded. Data from the Personal Interview, being open-ended, required special coding. The pre-coded questionnaires were designed in such a way that the responses could be punched on IBM cards directly from the questionnaire. However, prior to punching, each questionnaire was read and edited by a member of the staff and any responses which might cause doubt in the mind of a key-punch operator were clarified. If an answer of a respondent was unclear it was coded as "blank." After editing, all pre-coded data were punched on IBM cards by professional key-punch operators and then repunched (verified) to insure accuracy. Because of their open-ended nature, the data from the Personal Interview were handled differently. Members of the project staff discussed the replies and drew up a coding scheme based on important aspects of their content. When a set of categories for coding was agreed upon, the replies were re-read and entered on code sheets by two independent coders. If they agreed on at least 90 per cent of the coding no further checks were made, but if not, they discussed their differences and clarified their definitions, or else modified the coding scheme, after which a reliability check was run on a new sample of replies. The completed code sheets were then key-punched and verified as was done with the questionnaire materials. In all, over 2,500 responses of each principal were entered on IBM cards and so made available for tabulation and analysis.

The bulk of the data processing was carried out electronically through the use of high-speed computers and their associated equipment. A chief use of this equipment was to develop summary measures of concepts from responses in a given area. For example, one way to examine whether older or younger principals experience more role conflict in their work would be to compare the responses of the administrators in different age groups to a number of role conflict questions, but an alternative is to summarize the information from the set of questions into a "role conflict score" and then compare their scores by age. Since many of the concepts used in the various investigations of the Study have been measured with summary scores it is well to consider briefly the two statistical techniques, Guttman scaling and factor analysis, used to reduce data from a series of responses to a single score.

One method for arriving at a summary "role conflict score" is to take the responses of a given subject to each of a series of questions and sum them. This method of developing a "total score" gives equal weight to all questions. An advantage of both Guttman scaling and factor analysis over the "total score method" is that they provide an empirical basis for separating "good" indices of exposure to role conflict from "bad" and even further for weighting the good indices as to their degree of "goodness." Where Guttman scaling and factor analysis differ is in the criteria used to separate the "good" from the "bad" items and to weight the "good" ones. In general, the Guttman procedure involves fewer assumptions and has a more severe criterion of scalability than does factor analysis, whereas the latter is probably more objective.[3]

In approaching the problem of developing indices, we frequently used procedures suggested by Guttman to measure key concepts.[4] When these procedures could not be applied or when preliminary analysis revealed that dimensions other than the one conceptualized existed within the data, a principal components factor analysis was usually performed.[5] If the resulting factors could be interpreted with clear sociological meaning, their associated loadings were used as weights in computing factor scores, but if not sociologically meaningful, the factor loadings were rotated orthogonally using the Varimax criterion developed by Kaiser.[6] The new loadings were then converted to factor coefficients using the "shortened method" suggested by Harman and the resulting coefficients used as weights for computing factor scores.[7]

With this general background let us turn now to the specific methodological problems of the IJS investigation.

The IJS Inquiry

The instrument used to measure the Intrinsic Job Satisfaction of school principals was originally designed for several of the other investigations of the National Principalship Study, out of whose original research design the IJS investigation developed. The decision to study the school principal's intrinsic job satisfaction was made in 1964, three years after the completion of field-work activities, and a grant in support of a proposal to extend the Study was approved by the U. S. Office of Education in that year.

Although the design of the investigation had not been built into the National Principalship Study from the outset, we felt nevertheless that we might be able to shed light on some important sociological and educational questions by turning to the data collected from a national sample of public school principals. It was also clear that there would be some disadvantages. The formal defining of the problem after the collection of data set limits to what we could do, yet the advantages of proceeding seemed to far outweigh the disadvantages.

As noted in Chapter 1, we decided to restrict the investigation to male administrators, and the National Principalship Study produced a sample of 382 men principals of elementary, junior high and senior high schools in 41 cities.

The Measurement of IJS

Among the many instruments in the Role Questionnaire of the National

Principalship Study the principals completed, one dealt with the Enjoyment of Work Activities (Appendix A). In responding to it, the principals were asked to indicate how much they enjoyed ("a great deal," "very much," "somewhat," "very little," "not at all") each of twenty-six activities intrinsic to the principals' tasks. In addition, the principals also responded to a thirty-eight item instrument designed to ascertain their Satisfaction ("very satisfied," "moderately satisfied," "slightly satisfied," "slightly dissatisfied," "moderately dissatisfied," and "very dissatisfied") with Conditions of Work and Career (Appendix A).

Our measure of the IJS of principals, which we defined in Chapter 1 as the degree of gratification they derive from performing their managerial tasks, was developed from their responses to the Enjoyment of Work Activities Instrument and their responses to the 38 items in the Instrument, Satisfaction with Conditions of Work and Career, were used in the development of indices to measure other variables that will be employed in our analyses.

With respect to the measurement of IJS, our objective was to develop an index which would combine the responses of the principals to most of the questions in the Enjoyment of Work Activities Instrument in a stable summary score which 1) would indicate the relative position of individual principals along a continuum reflecting variation in their intrinsic job satisfaction and 2) would be based only on those items that belonged to a domain relatively independent of the principals' satisfaction with their work situation and their career. In order to select items of this kind from the Enjoyment of Work Activities Instrument for a summary measure of Intrinsic Job Satisfaction, we submitted all sixty-four items of the Enjoyment of Work Activities Instrument and the Satisfaction with Work Situation and Career Instrument to a principal components factor analysis. We then applied Kaiser's varimax rotation procedure[8] to the first three factors in the principal components solution. By maximizing the larger and minimizing the smaller loadings in the three-factor space, the varimax rotation provided a simple structure which eliminated many of the problems in the principal components solution arising from a single item loading moderately on more than one factor. We chose a three-factor rotation because the items in the instruments were designed to tap three general areas of reactions to the managerial role.

We then interpreted the "meanings" of the three rotated factors according to the content of the items which loaded "significantly" on each factor. An item was considered to be "significantly loaded" on a given factor if it passed two selection criteria. First, the absolute value of its loading on the factor in question had to be greater than or equal to .30. Second, the absolute value of its loading had to be at least .15 greater than its loading on any other factor. The varimax loadings of all 64 items in the factor analysis are presented in Appendix B (Table B-1). Loadings which are "significant" according to the above two criteria are marked with an asterisk. An examination of this table reveals three mutually exclusive and easily interpretable dimensions, one for each of the attitude areas the instruments were designed to tap. No item has loadings which are "significant" on more than one factor and no factor contains significantly loaded items from more than one of the three areas of reactions to work examined.

Of the three factors used in the varimax solution, only the second factor is of immediate relevance for the purposes of the present inquiry. Twenty of the twenty-six items in the Enjoyment of Work Activities Instrument loaded "significantly" on this factor. In order to obtain a summary measure of Intrinsic Job Satisfaction for each principal in the sample, we used these twenty significant loadings as weights in a factor scoring procedure called Harmon's "shortened" method.[9]

In using the IJS scores for male principals in this research report, we have considered it to be a continuous variable with a mean of 7.09, a standard deviation of 4.77 and a range of 27.55;[10] however to facilitate interpretation of the findings, we shall separate the 382 male principals into three groups ("low," "moderate," and "high") according to their IJS scores, making them as nearly equal in size as possible.

To obtain some insight into what is meant when we classify principals as relatively "high," "moderate," or "low" in IJS, the responses of the 382 male principals to the 20 questions that went into the IJS score were tabulated for each of the three levels of IJS (Table 3-1). In question 6, each of the principals was asked "To what degree do

Table 3-1. Percentage Distribution and Mean of the Responses of 382 Men Principals to the 20 Items in the IJS Factor Score, by Three Classifications of Their IJS Level

The Question	The Response Choices and Weights	
To what degree do you enjoy each of the following aspects of a principal's role?	5 = A great deal 4 = Very much 3 = Somewhat 2 = Very little	1 = Not at all 0 = Aspect not relevant in my particular situation

Item**	Principal's IJS Level	Per Cent of Principals Responding					Mean	N
		5	4	3	2	1		
6. Talking with a group of parents about a school problem.	High	66	31	2	1		4.62	125
	Moderate	27	60	12	1		4.14	125
	Low	8	50	36	6		3.59	128
	All Principals	33	47	17	3		4.11	378*
4. Talking with individual parents about a problem concerning their child.	High	60	40	1			4.59	126
	Moderate	24	60	17			4.07	127
	Low	9	54	36	2		3.70	128
	All Principals	30	51	18	1		4.12	381*
25. Working with curriculum specialists.	High	55	38	7			4.48	120
	Moderate	14	67	17	2		3.93	126
	Low	4	40	45	10	2	3.34	128
	All Principals	24	48	23	4	1	3.91	374*
13. Conducting teachers' meetings.	High	34	52	13	1		4.20	126
	Moderate	11	57	31	2		3.77	127
	Low	2	38	47	13	2	3.25	128
	All Principals	16	49	30	5	1	3.74	381*

*Missing cases due to "0" choices.

**Items are numbered according to their position in the 26-item research instrument (see Appendix A-1) and are presented in the order in which their factor loadings contributed to the IJS factor (item 6 had the highest factor loading and item 18 the lowest). For the factor loadings of items, see Appendix B, Table B-1.

Table 3-1 (continued)

Item**	Principal's IJS Level	Per Cent of Principals Responding					Mean	N
		5	4	3	2	1		
17. Handling public relations.	High	52	33	13	2		4.36	123
	Moderate	30	41	28	1		4.01	125
	Low	9	32	42	15	2	3.33	128
	All Principals	30	35	28	6	1	3.89	376*
14. Evaluating teacher performance.	High	21	47	22	8	2	3.79	126
	Moderate	2	34	41	18	5	3.11	127
	Low		12	56	25	8	2.71	128
	All Principals	8	31	40	17	5	3.20	381*
11. Working with youngsters who are having a hard time adjusting to a school situation.	High	56	39	5			4.52	126
	Moderate	24	51	21	4		3.95	125
	Low	12	40	43	6		3.58	128
	All Principals	31	43	23	3		4.01	379*
5. Serving on committees with parents.	High	42	43	8	7		4.21	121
	Moderate	8	50	36	5	1	3.59	119
	Low	1	32	53	14	1	3.17	127
	All Principals	17	41	33	9	1	3.65	367*
20. Supervising large groups of students.	High	40	43	16	2		4.21	120
	Moderate	11	46	39	2	2	3.62	125
	Low	3	32	34	19	2	3.16	127
	All Principals	18	40	34	8	1	3.65	372*

*Missing cases due to "0" choices.

**Items are numbered according to their position in the 26-item research instrument (see Appendix A-1) and are presented in the order in which their factor loadings contributed to the IJS factor (item 6 had the highest factor loading and item 18 the lowest). For the factor loadings of items, see Appendix B, Table B-1.

Table 3-1 (continued)

Item**	Principal's IJS Score	Per Cent of Principals Responding					Mean	N
		5	4	3	2	1		
16. Working with community agencies.	High	47	34	17	2		4.27	125
	Moderate	9	49	37	6		3.61	126
	Low	6	32	48	13	1	3.28	128
	All Principals	20	39	34	7		3.72	379*
10. Working with new teachers.	High	78	22	1			4.77	125
	Moderate	44	48	8			4.36	126
	Low	21	56	23			3.98	127
	All Principals	37	42	11			4.37	378*
2. Supervising the instructional program.	High	54	43	2			4.52	125
	Moderate	30	62	8			4.22	127
	Low	14	54	27	5		3.77	128
	All Principals	33	53	13	2		4.17	380*
9. Working with "average" teachers.	High	41	47	13			4.28	126
	Moderate	16	62	22			3.94	127
	Low	6	52	39	3		3.60	128
	All Principals	21	54	25	1		3.94	381*
8. Working with "exceptionally able" teachers.	High	73	25	2			4.70	125
	Moderate	50	43	7			4.43	127
	Low	31	49	21			4.10	127
	All Principals	51	39	10			4.41	379*

*Missing cases due to "0" choices.

**Items are numbered according to their position in the 26-item research instrument (see Appendix A-1) and are presented in the order in which their factor loadings contributed to the IJS factor (item 6 had the highest factor loading and item 18 the lowest). For the factor loadings of items, see Appendix B, Table B-1.

Table 3-1 (continued)

Item**	Principal's IJS Score	Per Cent of Principals Responding						
		5	4	3	2	1	Mean	N
24. Working with guidance personnel.	High	59	37	3	1		4.55	118
	Moderate	26	64	10	1		4.14	125
	Low	10	51	37	2		3.69	123
	All Principals	31	51	17	1		4.12	366*
19. Supervising office personnel.	High	25	48	23	4	1	3.92	120
	Moderate	1	43	51	5	1	3.38	126
	Low		22	59	19		3.03	127
	All Principals	8	37	45	9	1	3.43	373*
23. Preparing staff bulletins or announcements.	High	13	40	31	14	2	3.48	125
	Moderate	1	25	57	14	3	3.06	126
	Low	1	15	58	23	4	2.86	128
	All Principals	5	26	49	17	3	3.13	379*
15. Having the freedom to schedule one's own time.	High	21	47	22	8	2	3.79	127
	Moderate	2	34	41	18	5	3.11	127
	Low		12	55	25	8	2.71	128
	All Principals	5	17	39	31	8	3.20	382
7. Working primarily with teachers, rather than with pupils.	High	15	45	30	8	1	3.66	119
	Moderate	5	37	46	11	1	3.34	126
	Low	2	23	56	16	2	3.07	128
	All Principals	7	35	44	12	1	3.35	373*

*Missing cases due to "0" choices.

**Items are numbered according to their position in the 26-item research instrument (see Appendix A-1) and are presented in the order in which their factor loadings contributed to the IJS factor (item 6 had the highest factor loading and item 18 the lowest). For the factor loadings of items, see Appendix B, Table B-1.

Table 3-1 (continued)

Item**	Principal's IJS Score	Per Cent of Principals Responding 5	4	3	2	1	Mean	N
18. Supervising custodial personnel.	High	15	36	35	13	2	3.49	109
	Moderate		18	62	16	5	2.94	109
	Low	1	6	49	39	6	2.57	119
	All Principals	5	20	48	23	4	2.99	337*

*Missing cases due to "O" choices.

**Items are numbered accoring to their position in the 26-item research instrument (see Appendix A-1) and are presented in the order in which their factor loadings contributed to the IJS factor (item 6 had the highest factor loading and item 18 the lowest). For the factor loadings of items, see Appendix B, Table B-1.

you enjoy . . . talking with a group of parents about a school problem?" Sixty-six per cent of the principals classified as "high" in IJS responded "a great deal" as compared with eight per cent of the principals who were classified as "low." In question 4, each of the principals were asked "To what degree do you enjoy . . . talking with individual parents about a problem concerning their child?" Sixty per cent of the principals "high" in IJS responded "a great deal" while only nine per cent of those classified as "low" made the same response. Similar differences between principals considered "high," "moderate," and "low" in IJS can be seen through examination of the remaining 18 items in Table 3-1.

One further point deserves emphasis with respect to our measure of IJS. Our classification of principals into "high," "moderate," and "low" groups according to their IJS scores reflects relative, rather than absolute differences, in their Intrinsic Job Satisfaction. That is, it would be inappropriate to view principals in the group "low" on IJS as administrators who derive little satisfaction from their work tasks and those in the "high" category as principals who derive a high degree of IJS from their work. But it is appropriate to view principals in the high group as those who express more IJS than those in the moderate group; and to view principals in the moderate group as expressing more IJS than those in the low group. This point deserves special stress, because as Table 3-1 shows, a large majority of the principals express some degree of enjoyment in performing most of the activities considered in the Enjoyment of Work Activities

Instrument. For the average amount of enjoyment principals derived from different activities in the Enjoyment of Work Activities Instrument, see Appendix C, Table C-1.

Statistical Models and Statistical Inference

In later chapters we shall examine the relationship of IJS to many factors which can be thought of as its possible determinants. Our strategy of statistical analyses will not be to see how well other scores will predict the IJS score, for our focus is not primarily upon the strength of any given relationship but rather on whether or not theoretically derived hypotheses receive empirical support. We shall leave to later inquiries the determining of the independent and joint contribution of variables to the prediction of IJS.

In testing hypotheses about possible determinants of IJS (Chapters 5, 6, and 7), we shall divide each determinant under consideration into approximate thirds or quarters and then compare the average IJS scores of the principals in the "highest" and "lowest" categories. To test whether or not a monotonic trend found in our sample could, in fact, exist in the population from which it was drawn, we shall test the null hypothesis that the difference between the two means is zero. We shall report the probability that a difference as large as that observed could have occurred by chance through random sampling from a population in which the difference is zero. For purposes of coming to a conclusion about an hypothesis or basic assumption, we shall require that the relationship be significant at below the .05 level, using a one-tailed test. For the analyses in Chapter 4, in which our objective is not to test hypotheses, but to explore whether certain variables are associated with IJS, we shall use two-tailed tests of significance in order to come to a decision about whether a relationship is statistically significant at below the .05 level.

One consideration which had an important effect upon the analysis of the IJS data involved a decision about whether to undertake separate analyses for the elementary, junior high and senior high principals; if they varied significantly in their Intrinsic Job Satisfaction, it would have been necessary to conduct our examination of the determinants of IJS for each school level. In Chapter 4, we report findings which show that there are no significant differences between the mean IJS scores of principals at different school levels. Since the issue of a possible relationship between school level and the IJS of principals was a pivotal consideration in determining the form of the IJS analysis, we also cross-tabulated the responses of the principals to each item in the Enjoyment of Work Activities Instrument with the principals' school level. This analysis showed that on twenty-three of the twenty-six items in the instrument there is no statistically significant relationship at below the .05 level between school level and the degree of enjoyment of the work activity (Appendix C, Table C-2). In addition, for principals at each school level, we rank ordered the twenty-six items in the Enjoyment of Work Activities Instrument according to the mean enjoyment they expressed for each item. We then calculated the intercorrelation between each pair of the three sets of ranked items, using Spearman's rank correlation technique. The rank correlation coefficients between items ordered according to the responses of three groups of principals were as follows: .95 for elementary and junior high school principals; .97 for elementary and senior high principals; and .99 for junior and senior high school principals.

In light of the above findings and evidence to be presented in Chapter 4, we decided it was not necessary to carry out separate analyses of the determinants of IJS for each school level.

In this chapter we have presented an overview of the research methods of the National Principalship Study and have considered methodological questions of special relevance to the examination of IJS. In addition, we have described in detail our measure of the IJS of school principals. In the next chapter we begin to search for some of the possible determinants of IJS.

Notes and References for Chapter Three

1. The first part of this chapter, pages 1-9, is based largely on materials presented in earlier reports of the National Principal Study. See especially, Neal Gross and Robert E. Herriott, Staff Leadership in Public Schools (New York: John Wiley & Sons, Inc. 1965), Chapter II.

2. The IJS and CS studies were based on the 382 men principals in the sample. See Chapter 1 for a discussion of this matter. The National Principalship Study also obtained a large body of data from teachers and higher administrators. For information about the sample and nature of these respondents and the procedures used to obtain data from them, see Gross and Herriott, op. cit., Chapter II.

3. For an excellent treatment of some of the theoretical and methodological issues of scaling see Warren S. Torgerson, Theory and Methods of Scaling (New York: John Wiley and Sons, 1958).

4. The most efficient Guttman scaling procedure available in 1960 and the one used by the National Principalship Study was Stone's extension of Ford's rapid scoring procedure. See Carol L. Stone, "A Machine Method for Scaling as Many as Twelve Dichotomies," Washington Agricultural Experiment Station Circular 329 (Pullman: Institute of Agricultural Sciences, State College of Washington, 1958). Also, see Chad Gordon, "A Note on Computer Programs for Guttman Scaling," Sociometry, XXVI (1963), pp. 129-130.

5. For one discussion of factor analysis, see Harry H. Harman, Modern Factor Analysis (Chicago: University of Chicago Press, 1960); for a computer program for performing principal components factor analysis,

see William W. Cooley and Paul R. Lohnes, Multivariate Procedures for the Behavioral Sciences (New York: John Wiley and Sons, 1960), pp. 173, 176-178.

6. See Henry F. Kaiser, "The Varimax Criterion for Analytic Rotation in Factor Analysis," Psychometrika, XXIII (1958), pp. 187-200; Henry F. Kaiser, "Computer Program for Varimax Rotation in Factor Analysis," Educational and Psychological Measurement, XIX (1960), pp. 413-420; or Cooley and Lohnes, op. cit., pp. 174-175, 179-182.

7. See Henry F. Kaiser, "Formulas for Component Scores," Psychometrika, XXVII (1962), pp. 33-37.

8. Ibid., pp. 33-37.

9. See Harman, op. cit., Chapter XVI. For readers who are unfamiliar, or in disagreement, with Harman's shortened method, we note that a single principal component analysis of the twenty "significant" IJS items alone yielded a factor score which had a Pearsonian correlation of .98 with the factor score derived from the rotated three-factor solution.

10. In order to avoid negative mean IJS scores in the comparison of subclassifications of principals, we added a constant of 6.80 to each principal's IJS score. The IJS scores are very nearly normally distributed, with a skewness of -.012 and a kurtosis of .178, both of which are very minor in their deviation from the zero values expected in samples from an exactly normal population.

Chapter 4: Some Possible Correlates of Intrinsic Job Satisfaction: Variables Unrelated to the Theoretical Formulation

In Chapters 5, 6 and 7 we shall test a series of hypotheses that emerged from our theoretical formulation of determinants of intrinsic job satisfaction. In this chapter we consider certain independent variables which were not included in the hypotheses derived from our theoretical formulation, but whose relationship to IJS we nevertheless wanted to examine.

We felt it important to determine the relationship of these variables to IJS for three reasons. The first was to find out whether certain characteristics of the principal or his school, for example, his age or school level, needed to be taken into account in testing the hypotheses we shall consider later. The second was to ascertain whether a number of variables which have been shown to be related to dimensions of job satisfaction in other occupational settings, for example, education and length of work experience, were related to IJS. The third was to examine possible correlates of principals' enjoyment of managerial tasks that kindled our curiosity, for example, their religion or race.

The following classification offers a convenient set of categories for the 13 variables selected for analysis:

1. School Characteristics.
2. Formal Academic Training.
3. Career Line.
4. Other Personal Characteristics.

School Characteristics

School Level

The men principals in our sample served in elementary, junior, and senior high schools. Is there any relationship between the level of school the principal administers and his enjoyment of managerial tasks?

When we examine the association between school level and IJS, the findings reveal that the IJS mean score of the principals of junior high schools is highest (7.70), that of elementary principals next highest (6.90), and that of the senior high principals the lowest (6.70) (Table 4-1). However, an F-test of the means of the three school level groups shows that they are not significantly different from each other at below the .05 level (the criterion we have adopted to test relationships); we therefore interpret the findings as supporting the null hypothesis.

Number of Pupils in School

Although school level is not related to IJS, perhaps size of student body is. Although elementary schools generally have smaller enrollments than secondary schools, there is still considerable variation in the number of pupils enrolled in schools at each level. For example, among the elementary schools in our study a number of them had enrollments of over 1,000 pupils whereas some of them had less than 300. One could offer equally plausible arguments that school size would be positively or negatively related to IJS. On the one hand it could be maintained

Table 4-1. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by School Level

(N = 382)

School Level	Principal's IJS Score Low	 Moderate	 High	Mean IJS Score	Standard Deviation	Number of Cases
Elementary	37%	31%	34%	6.90	4.57	98
Junior High	31	29	39	7.70	5.04	129
Senior High	34	40	28	6.70	4.64	155

$F = 1.65$; $p > .19$, two-tailed test.

that the smaller the school, the greater the IJS of the principal since he would probably be exposed to less pressure from teachers and parents in a smaller school. On the other hand, it could be contended that the larger the school, the more enjoyment a principal would derive from his managerial tasks because he would feel that his job was one of greater importance in a large school.

The data reveal that neither of these arguments receive any empirical support. There are only small differences in the proportion of principals in the highest IJS category when they are classified into four categories according to the size of their schools (Table 4-2). Furthermore, the differences among the mean IJS scores of the principals in the four groups are not statistically significant.

The Location of Schools

The educational organizations the men principals in our study managed were located in various sections of the United States. Does the EMT of principals vary by region of the country?

To examine this question, we categorized our sample into the following regional classifications: those who administered city schools in the South, East, Midwest, and Far West.[1] The findings revealed that the IJS scores of the principals in the East and the South were higher than those of principals either in the Midwest or Far West (Table 4-3). Forty-three per cent of the principals in the cities of the East were in the higher IJS category, in comparison with 34 per cent of those in South, 30 per cent in the Far West, and 27 per cent in the Midwest. When the mean IJS scores

Table 4-2. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Number of Pupils in School

(N = 382)

Number of Pupils in School	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Above 1516	30%	34%	36%	7.50	4.56	112
1023 - 1516	30	37	33	7.24	4.80	109
670 - 1022	40	29	31	6.40	5.29	96
Under 669	37	31	32	7.13	4.22	65

$F = 0.96$; $p > .41$, two-tailed test.

Table 4-3. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Region

(N = 382)

Region	Principal's IJS Score Low	Principal's IJS Score Moderate	Principal's IJS Score High	Mean IJS Score	Standard Deviation	Number of Cases
East	29%	28%	43%	7.99	4.82	92
South	32	34	34	7.11	4.67	107
Midwest	40	33	27	6.67	4.95	106
Far West	32	38	30	6.56	4.53	77

$F = 1.69$; $p > .17$, two-tailed test.

of the principals in the four regions are compared, however, we find that they are not significantly different from each other. We conclude, therefore, that the evidence does not support a patterning of IJS by region.

Socio-economic Composition of the Student Body

Now we turn to another characteristic of schools which might possibly influence the IJS principals: the socio-economic composition of the student body. Some might argue that this characteristic would be positively related to IJS on the assumption that schools in higher socio-economic areas of a community tend to attract more qualified teachers and are less difficult to manage because of "the middle-class" values of their students. Others might maintain, however, that the relationship between the SES of the student body and IJS would be negative. They could argue, for example, that administering a lower class school is a more challenging assignment than managing a school whose students come from higher socio-economic backgrounds.

To explore this issue, we developed a factor score, Average Socio-economic Level of Parents of Students in a School, based on a principal components analysis of the principals' responses to six questions about the educational, occupational, and income levels of parents in their schools.[2]

Table 4-4 reveals that when the principals were categorized into four groups on the basis of the average socio-economic status of their students those in the two lowest categories had higher IJS scores on the

Table 4-4. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Socio-Economic Composition of the Student Body of His School

(N = 382)

Socio-Economic Composition of the Student Body	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	36%	30%	34%	6.79	5.24	93
Moderately High	40	30	30	6.42	5.07	106
Moderately Low	34	37	29	7.07	4.24	95
Low	24	36	40	8.23	4.27	88

$F = 2.53$; $p > .06$, two-tailed test.

average than those in the two highest ones. However, when an F-test was applied to the four IJS scores they were not significantly different from each other. We interpret the finding as not supporting a relationship between the social class composition of a school and the principal's IJS.

Formal Academic Training

Is there any basis for assuming that the amount of formal academic preparation for their educational careers affects the enjoyment principals derive from their managerial tasks? In attempting to answer this question we shall examine the relationship to IJS of three indices of their academic preparation: (1) total semester hours they had taken in graduate courses in education; (2) number of semester hours completed in specialized graduate courses in educational administration; and (3) their highest academic degree.

Graduate Courses in Education

When we use the total semester hours in graduate education courses accumulated by the principal as a measure of his formal academic preparation, we find no evidence to support the assumption of either a positive or negative relationship between formal preparation and IJS. The mean IJS scores of the administrators who had taken 30 hours or less of graduate courses in education was 6.53 as compared to 7.56 for those who had taken 31 to 60 hours, and 6.76 for principals with 60 hours or more of graduate study (Table 4-5). An F-test of the means of the three categories

Table 4-5. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by the Number of Semester Hours of Graduate Education Courses Taken

(N = 382)

Semester Hours of Graduate Education Courses	Principal's IJS Score Low	Principal's IJS Score Moderate	Principal's IJS Score High	Mean IJS Score	Standard Deviation	Number of Cases
61 +	36%	34%	30%	6.76	3.87	72
31 - 60	30	35	35	7.56	5.10	168
0 - 30	38	30	32	6.53	4.73	142

F = 2.13; $p > .12$, two-tailed test.

of principals reveals that they are not significantly different from each other.

Graduate Courses in Educational Administration

When we classified the principals according to the number of semester hours they had taken in courses in educational administration, the findings revealed that the highest mean IJS score was obtained by the principals who had taken the fewest courses and the lowest mean score by those who had taken the most (Table 4-6). The differences among the mean IJS scores of the principals who had taken a relatively small, medium, and large number of courses in educational administration, however, were not significant statistically.

Highest Degree

Of the men principals in our study, approximately 10 per cent had been recipients of doctor's degrees, 85 per cent had obtained master's degrees, and five per cent had achieved only bachelor's degrees. Is there any relationship between this index of formal training and IJS? Table 4-7 reveals that the principals who had received a bachelor's degree had the highest mean IJS score (7.60), those who had taken a doctorate the next highest score (7.33), and those with a master's degree the lowest mean score (7.02). However, as in the case of the two other indices of formal preparation we have examined, the differences among the mean IJS scores are not significant statistically.

We conclude, therefore, that formal preparation as indexed by either

Table 4-6. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by the Number of Semester Hours of Educational Administration Courses Taken

(N = 382)

Semester Hours of Educational Administration Courses	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
41 - 60	31%	38%	31%	6.95	3.94	59
21 - 40	34	37	29	6.98	4.76	154
0 - 20	35	28	37	7.24	5.05	169

$F = 0.15$; $p > .86$, two-tailed test.

Table 4-7. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Highest Academic Degree Obtained

(N = 382)

Highest Academic Degree	Principal's IJS Score Low	Moderate	High	Mean IJS Score	Standard Deviation	Number of Cases
Doctorate	26%	50%	24%	7.33	3.99	43
Master's	35	31	34	7.02	4.83	320
Bachelor	21	37	42	7.60	5.60	19

F = 0.24; p > .79, two-tailed test.

total semester hours in graduate education courses, hours in educational administration courses, or highest degree obtained is not related to IJS.

The Career Line

We have found that the following school characteristics are not associated with IJS: school level, size of school, region in which the school is located, and the socio-economic composition of the student body. Our data have also revealed that three indices of the principals' formal preparation for their managerial position were not correlated with their intrinsic job satisfaction. Now we turn to the amount of previous teaching and administrative experience of the principals and inquire if they have any influence on IJS.

Previous Teaching Experience

Some of the men principals in our study brought to their managerial responsibilities a long history of teaching experience whereas others did not: over one-seventh of them had 15 or more years of teaching experience prior to their becoming principals whereas over one-fourth had been teachers five years or less. It is not difficult to offer *a priori* lines of reasoning to support both a positive and negative relationship between amount of previous teaching experience and IJS. Thus, one could argue that principals with a great deal of experience as teachers would have a better understanding of factors that facilitate and hinder learning and that this knowledge would have positive effects on the principal's

IJS. On the other hand, one could also argue that a principal who had considerable teaching experience would gain little pleasure from administrative tasks.

Our findings revealed that the proportion of principals in the highest IJS category tended to rise with increasing years of teaching experience (Table 4-8). However, when the mean IJS scores of the principals in the four categories of teaching experience are compared, we find that the differences among them are not statistically significant. We interpret these findings as indicating that years of teaching experience and IJS are not related.

Experience in the Principalship

Is the amount of experience as a principal related to IJS? Table 4-9 reveals that the answer is "No." There is no significant difference in the mean IJS scores of the administrators when they are grouped into four categories on the basis of the number of years they had served in the principalship.

A similar conclusion emerged when we examined the mean IJS scores of the administrators according to the age when they became principals for the first time (Table 4-10). Although the highest mean IJS scores were obtained by the men who had achieved the principalship at a relatively late age (46 years or older) and the lowest score by those who had obtained their first principalship when they were under 35, the differences in the mean IJS scores are again not significant statistically.

Table 4-8. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Number of Years as a Teacher

(N = 382)

Number of Years as a Teacher	Principal's IJS Score Low	Moderate	High	Mean IJS Score	Standard Deviation	Number of Cases
15 or more	31%	28%	41%	8.02	4.48	65
10 - 14	37	32	31	7.66	4.49	102
6 - 9	37	32	31	6.30	4.76	117
0 - 5	34	37	29	6.82	5.17	98

F = 2.52; $p > .06$, two-tailed test.

Table 4-9. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Number of Years in the Principalship

(N = 382)

Number of Years in the Principalship	Principal's IJS Score Low	Moderate	High	Mean IJS Score	Standard Deviation	Number of Cases
17 or more	36%	31%	33%	6.97	4.86	101
10 - 16	30	35	35	7.49	4.65	88
5 - 9	37	36	27	6.59	4.73	97
under 4	31	31	38	7.34	4.86	96

F = 0.67; $p > .57$, two-tailed test.

Table 4-10. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Age at Time of First Principalship

(N = 382)

Age at Time of First Principalship	Principal's IJS Score Low	Moderate	High	Mean IJS Score	Standard Deviation	Number of Cases
46 or older	29%	30%	41%	7.71	5.21	76
41 - 45	37	32	31	6.84	4.86	110
35 - 40	32	36	32	7.24	4.46	94
34 or under	35	34	31	6.75	4.63	102

F = 0.74; $p > .53$, two-tailed test.

Other Personal Characteristics

Now we examine whether there is a relationship between three additional personal characteristics of principals and their IJS: age, religion, and race.

Age

Is age, like the other characteristics we have examined thus far, a nondiscriminating characteristic or principals who vary in their IJS? The data reveal that it is: there are no significant differences in the mean IJS Scores of the principals when they are classified into three age groups (Table 4-11).

Religion

Of the 382 men principals, 17 professed no religious affiliation or declined to answer. Of the remaining 365, the great majority (76 per cent) were Protestant, 14 per cent were Catholic, and 10 per cent were Jewish. The data revealed that the Jewish principals had the highest average IJS score (9.23), the Catholic principals the second highest (7.48), and the Protestants the lowest (6.76). The F-ratio reported in Table 4-12 shows that these differences are statistically significant.

Race

The final variable to be examined is race. Of the 382 men principals less than one out of 10 were Negro. Table 4-13 reveals that the Negro principals had higher IJS scores on the average than the white principals (9.52 versus 6.87) and that the difference in their mean scores is

Table 4-11. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Age

(N = 382)

Age	Principal's IJS Score Low	Moderate	High	Mean IJS Score	Standard Deviation	Number of Cases
56 or older	31%	26%	41%	7.54	4.98	154
45 - 55	37	37	29	6.59	4.73	156
44 or younger	31	38	31	7.20	4.36	72

F = 1.58; $p > .21$, two-tailed test.

Table 4-12. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Religion

(N = 365)*

Religion	Principal's IJS Score Low	 Moderate	 High	Mean IJS Score	Standard Deviation	Number of Cases
Jewish	17%	33%	50%	9.23	4.49	36
Catholic	33	32	35	7.48	4.42	51
Protestant	36	34	30	6.76	4.49	278

*Data unavailable for sixteen cases.

F = 3.53; $p < .05$, two-tailed test.

Table 4-13. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Race

(N = 382)

Race	Principal's IJS Score Low	Moderate	High	Mean IJS Score	Standard Deviation	Number of Cases
Negro	19%	28%	53%	9.52	4.42	33
White	35	34	31	6.87	4.74	349

$t = 10.17$; $p < .01$, two-tailed test.

significant statistically.

In this chapter we have examined a number of characteristics of principals and their schools to determine if they were associated with their intrinsic job satisfaction. Of the 13 variables considered, we found that only two of them, religion and race, were significantly related to IJS. The following characteristics of the principals' schools were not associated with IJS at below the .05 level of statistical significance: school level, size of student population, region, and average socio-economic status of students. We also found that indices of formal academic training or of experience as a teacher or administrator were not significantly related to IJS. Finally, the findings revealed that age did not discriminate in a significant manner among principals who varied in their intrinsic job satisfaction.

Notes and References for Chapter Four

1. The South included states in the following areas: South Atlantic, East South Central, West South Central; the East included states in New England and the Middle Atlantic area; the Midwest included states in the East North Central and West North Central areas; and the West included states in the Mountain and Pacific areas.

2. The six questions were: "What percentage of the Students in your school:"

1. Come from homes where at least one parent is a college graduate.
2. Come from homes where neither parent has gone to school beyond high school.
3. Come from homes where the father is a professional person, business executive, or manager.
4. Come from homes where the father is an unskilled or semi-skilled worker.
5. Come from homes where the parents have a combined family income of $10,000 or more?
6. Come from homes where the parents have a combined family income of less than $5,000.

For a more detailed consideration of this factor score see, Neal Gross and Anne E. Trask, Men and Women as Elementary School Principals, Final Report No. 2., Cooperative Research Project No. 853, June, 1964, Appendix A.

Chapter 5: Relationships with Superordinates

We proposed in Chapter 2 a theoretical explanation to account for variation in the Intrinsic Job Satisfaction of men who manage the same type of organization. In this and the next two chapters we shall test its utility with reference to the IJS of school principals. Our theoretical formulation leads to the examination of circumstances in the work environment of school principals and their own personal attributes that would serve to facilitate or hinder role performance that would gratify their postulated prepotent needs for self-actualization and autonomy. Although a principal is the chief administrative officer of his school, he is also subordinate to, dependent on, and hence subject to many influences that emanate from officials who are his administrative superiors. A number of conditions in this aspect of his role network could have consequences for the degree to which he could perform in a manner that would permit him to satiate the psychological needs which we have assumed are of most relevance to his IJS. We now examine whether there is any empirical support for the hypotheses we tested based on this line of reasoning.

Autonomy from Superordinates

The degree of autonomy that the higher administration of different schools systems grants to principals varies greatly. This variation is evidenced by the replies of the principals to a series of questions about the amount of freedom that they are given by their superiors in the operation of their schools (Table 5-1). About one-eighth of the

Table 5-1. Responses of 382 School Principals to Nine Questions about the Autonomy Given Them by the Higher Administration

To what extent does the higher administration in your school system do this?	Per Cent of Principals Saying:					
	Always	Almost Always	Occasionally	Almost Never	Never	N*
1. Permit a principal to determine the educational objectives for his school.	12%	58%	20%	8%	3%	377
2. Permit a principal to use his own basis for judging how good a job his school is doing	6	49	29	13	3	374
3. Allow a principal to make his own decisions as to what information he should pass on to staff members.	12	59	22	6	2	380
4. Accept a principal's judgment as to whether the program of one grade prepares students adequately for the next grade.	15	55	18	11	2	372
5. Give a principal complete freedom to coordinate the instruction in the same subject at a given grade level.	20	58	14	7	2	376
6. Encourage a principal to refer parents with major complaints to the higher administration.	7	9	33	32	9	380
7. Let a principal allocate his time as he sees fit.	25	67	7	1	1	381

*Incomplete data due to replies of principals who responded "Item not relevant to my situation."

Table 5-1 (continued)

To what extent does the higher administration in your school system do this?	Always	Almost Always	Occasionally	Almost Never	Never	N*
8. Allow a principal to decide whether to introduce major changes, desired by the higher administration, into the curriculum of his school.	4	25	31	29	12	377

*Incomplete data due to replies of principals who responded "Item not relevant to my situation."

principals say that their administrative superiors "always" allow them to determine the educational objectives that will guide the operation of their schools (item 1). Approximately three out of 10 indicate that they always or almost always are allowed to decide whether or not to introduce major curriculum changes proposed by the higher administration into their schools (item 8). What consequence, if any, does the amount of autonomy a principal receives from the higher administration of his school system have on his intrinsic job satisfaction?

We have posited that managerial personnel such as principals have a strong need for autonomy and that IJS varies directly with the extent to which they can fulfill it in their role performance. Other things being equal, a condition that we assume would influence the degree to which administrators of individual schools behave in an autonomous manner is the amount of freedom they are granted by the higher administration in the operation of their organizations: the less control exercised by their superiors, the more principals can exhibit independence in their role performance.

There is another line of reasoning based on our theoretical assumptions that leads us to anticipate that managerial autonomy will be positively associated to IJS: we have assumed that principals as managers of their organizations have strong needs to experience feelings of personal growth and development and the realization of their own unique potentialities. If they are given little latitude in their decision-making, they would have few chances to experiment with their own ideas about novel approaches to educational problems or to utilize their own unique skills. They would thus be limited in their opportunities to engage in the kinds of role performance that may be viewed as desiderata for fulfilling self-actualization needs. It follows from both lines of reasoning that:

Hypothesis 5-1: The more autonomy a principal is granted by his superordinates, the greater his IJS.

To test this hypothesis we used as an index of the principals' autonomy a summary measure developed from a principal components factor analysis of their responses to an "Autonomy in Decision-Making" instrument. It required them to specify the degree of freedom they were given in 20 different areas by their superiors in operating their schools. The eight items with the highest loadings on the factor, Autonomy Granted by Superordinates, are those presented in Table 5-1, and factor weights were applied to the principals' replies to these items and "factor scores" obtained.[1]

When this index of autonomy is cross-tabulated with the IJS scores of the principals, support is found for the hypothesis: 39 per cent of those in the group granted the most autonomy had the highest IJS scores as compared to 27 per cent of the principals with the least autonomy (Table 5-2). The difference in the mean Intrinsic Job Satisfaction scores of the principals in the highest and lowest autonomy groups (7.73 versus 6.51) is 1.22 and it is significant statistically. We conclude that the autonomy the higher administration grants to principals is positively associated with their IJS.

Table 5-2. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of the Higher Administration's Score on Autonomy Granted the Principal

(N = 380)*

Higher Administration's Score on Autonomy Granted Principal	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	28%	33%	39%	7.73	4.51	123
Moderate	37	29	34	7.01	4.92	130
Low	36	37	27	6.51	4.81	127

* Data unavailable for two cases.

$t_{(H-L)} = 2.18$; $p < .02$

Role Ambiguity in Relationships with Administrative Superiors

We now turn to a second circumstance, degree of role ambiguity a principal experiences in his relationships with his administrative superiors, that our theoretical formulation leads us to anticipate will be related to intrinsic job satisfaction.

We assume, other things being equal, that if principals encounter considerable role ambiguity in their relationships with their bosses they would find it difficult to engage in a consistent pattern of role performance and behavior that would result in successful accomplishment of tasks. They would be unclear about the type of role performance expected of them and the kinds of support and help they could anticipate from their superiors in resolving their major organizational problems. Such conditions, we assume, would diminish their chances of satiating their needs for personal growth and development and for feelings of worthwhile accomplishment. On the basis of this reasoning, we hypothesized that:

Hypothesis 5-2: The greater the role ambiguity a principal perceives in his relationships with his administrative superiors, the lower his IJS.

To test this hypothesis, we shall use the principals' responses to two questions. The first focused on the clarity of their role relationships with "the higher administration" in general. The principals were asked, "Speaking generally about the higher administration in your school system, how clear [very clear, fairly clear, not at all clear] are the rules and regulations that influence your work?" The second question dealt with the principal's relationships with his immediate administrative superior, for example, a district or assistant superintendent. The principals were asked: ". . .to what extent [has] the higher administration made it clear who is responsible for what in your dealings with your immediate administrative superiors?"

Table 5-3 shows that a substantially larger percentage of principals who described the rules and regulations of the higher administration affecting their work as characterized by ambiguity ("not at all clear" or "fairly clear") were in the lowest IJS category as compared to those who viewed the rules and regulations as "very clear" (46 per cent versus 25 per cent). Similar findings emerged with respect to the degree of ambiguity in the principal's relationships with his immediate administrative superior (Table 5-4). Whereas 46 per cent of the principals who responded that there was considerable or some degree of ambiguity over "who was responsible for what" in their relationships with their immediate boss had low IJS scores, only 31 per cent of those who described the division of labor in this relationship as "very clear" were in this category. Since the differences in the mean IJS scores of the principals expressing low and high ambiguity in both tables were in the predicted direction and were significant statistically, we conclude that the evidence supports the hypothesis.

Table 5-3. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Two Levels of Clarity of the Higher Administration's Rules and Regulations

(N = 373)*

Clarity of Higher Administration's Rules and Regulations	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Very clear	25%	35%	40%	7.78	4.82	227
Not clear or fairly clear	46	31	23	5.97	4.45	146

* Data unavailable for nine cases.

$t_{(H-L)} = 3.66; p < .001$

Table 5-4. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Clarity of Division of Labor in His Relationships with Immediate Administrative Superior

(N = 375)*

Clarity of Division of Labor	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Very clear	31%	36%	34%	7.29	4.85	307
Nor clear or fairly clear	46	24	31	6.09	5.10	68

*Date unavailable for seven cases.

$t_{(H-L)} = 1.90; p < .03$

Decision-making Process of the Higher Administration

We have stressed that the principal serves as the formal leader of a sub-unit of a school system. In carrying out his managerial tasks he must cope with many problems, some of which invariably require decisions by the higher administration. For example, issues involving leaves of absence for personnel, basic changes in the school curriculum, and changes in the allocation of the school budget normally require decisions by his administrative superiors. In some school systems, principals experience considerable delay in securing action on matters of this kind while in others they are handled expeditiously. The school principals in our sample reported considerable variability in the frequency with which the decisions of the central office served only to confuse matters or were based on rules and regulations of which they had no awareness. A principal who was exposed to decision-making machinery in the higher administration that was slow, cumbersome, or inefficient could be expected to encounter serious obstacles in his own planning and decisions, and hence greater barriers to role performance characterized by the successful completion of tasks. Such conditions, we have maintained, would serve to decrease the probability of an administrator's behaving in a manner that would allow him to derive feelings of worthwhile accomplishment in his work. From this line of reasoning it follows that:

Hypothesis 5-3: The more effective a principal perceives the decision-making machinery of the higher administration, the greater the IJS of the principal.

As an index of the independent variable, we shall use a summary measure of the responses of the principals to eight questions about the decision-making apparatus of the higher administration. The principals were asked:

> "When you have problems that formally require a decision by the higher administration, about how frequently [always, almost always, occasionally, almost never, never] do the following things occur?"

1. How frequently are you uncertain about whom you should deal with?
2. How frequently do you find it difficult to contact the person who must make the decision?
3. How frequently do you get a decision in time to deal with the problem most effectively?
4. How frequently is the decision directly pertinent to your problem?
5. How frequently do you feel that the decision only confuses matters?
6. How frequently do you feel the decision is based upon rules and regulations that you had never been aware of before?
7. How frequently are you able to move right ahead in solving your problems after receiving the decision?
8. How frequently do you feel discouraged about trying to get further decisions from the higher administration?

The replies of the principals to these eight items were subjected to a principal components factor analysis, and the resulting factor weights[2] were then applied to their responses to obtain "factor scores" for each of them on the perceived adequacy of the higher administration's decision-making process.

When this index of the principal's description of the "quality" of the decision-making machinery of the higher administration is related to his IJS score, the findings offer support for the hypothesis: 47 per cent of the principals who were in the top group on quality of the decision-making process of the central office have high IJS scores as compared to 30 per cent in the medium, and 24 per cent in the lowest, group (Table 5-5). The difference between the mean IJS scores of the principals in the two extreme groups is 2.85 which is significant statistically. We conclude, therefore, that there is a positive relationship between the principal's view of the effectiveness of the decision-making apparatus of the higher administration in his school system and his intrinsic job satisfaction.

Communications from the Higher Administration

If a principal does not have open and clear lines of communication with his superordinates, he can be expected to encounter serious difficulties in administering his school. If his superiors fail to inform him of their plans for reorganization of the school system, then he will lack the type of information he requires for his own planning. If they provide him with information, but it is inaccurate, he will make decisions based on erroneous assumptions. And if the communications between a principal and his superiors are characterized by ambiguity, he will be

Table 5-5. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of the Higher Administration's Score on Effectiveness of Decision Making

(N = 382)

Higher Administration's Score on Effectiveness of Decision Making	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	22%	31%	47%	8.71	4.97	121
Moderate	35	35	30	6.82	4.32	130
Low	43	34	24	5.86	4.63	131

$t_{(H-L)} = 4.71$; $p < .001$.

exposed to confusion and uncertainty. Organizational inadequacies of these kinds, it seems reasonable to assume, would serve as barriers to a principal's dealing efficiently or effectively with his managerial problems, and hence could be presumed to decrease his chances of deriving a sense of worthwhile accomplishment in the performance of his work. It follows that:

Hypothesis 5-4: The more adequate a principal perceives the communications he receives from his administrative superiors, the greater his IJS.

To test this hypothesis we shall use two sets of data, one dealing with the principal's immediate administrative superior and the other with the superintendent of his school system.

An index of the principal's perception of the adequacy of the communications he receives from his immediate administrative superior was secured from the principals' responses to the following seven items:

> "To what extent [always, almost always, occasionally, almost never, never] does [your immediate superior] engage in the following kinds of behavior:

1. Presents the views of principals to his superiors in an accurate manner.
2. Provides principals with information they need to make important decisions.
3. Presents the views of the higher school administration to principals in an accurate manner.
4. Prepares memoranda to principals that are confusing.

5. Expresses his ideas clearly.
6. Explains the reasons behind important decisions he makes.
7. Engages in "double-talk."

A principal components factor analysis was performed on their responses to these items, and the resulting factor weights[3] were applied to their replies to obtain factor scores. When this index of adequacy of communications with the principal's immediate superior is cross-tabulated with the principal's own IJS score, the data provide support for the hypothesis (Table 5-6). The positive trend of the data is seen in the mean IJS scores in column 5; it is clear also in column 4, which shows the proportion of principals highest in IJS at each of three levels of adequacy of communication of their superiors. When we compare the principals whose administrative superiors have the highest and lowest Adequacy of Communication Scores, we find that 46 per cent of the former in contrast to 19 per cent of the latter have the highest IJS scores. The difference between the mean IJS scores of the highest group (9.01) and that of the lowest group (5.27) is 3.74 on the IJS factor score; it is significant statistically, and therefore we conclude that these findings support Hypothesis 5-4.

To test this hypothesis with respect to the principals' views of the adequacy of communication with their school superintendents, another set of factor scores[4] was used. It was derived in the same manner used to measure the perceived adequacy of communications the principals received from their immediate superiors but in this case dealt with communications from the superintendent. The relationship between this

Table 5-6. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of His Immediate Administrative Superior's Score on Adequacy of Communications

$(N = 374)^*$

Immediate Superior's Score on Adequacy of Communications	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	21%	34%	46%	9.01	4.38	125
Moderate	33	32	35	6.97	4.64	124
Low	45	36	19	5.27	4.59	125

*Data unavailable for eight cases.

$t_{(H-L)} = 6.60$; $p < .001$.

score of the principal's views of the adequacy of communications from his superintendent and IJS appears in Table 5-7. The data show that 48 per cent of the principals whose superintendents had the highest Adequacy of Communications Scores were in the top IJS group in comparison with 20 per cent of those whose superintendents scored lowest in this respect. Furthermore, the mean IJS scores of principals whose superintendents scored highest on adequacy of communications were markedly greater than those of principals whose superintendents had the lowest communications scores (8.93 versus 5.24). The difference of 3.69 units in the IJS score is significant statistically. We conclude, on the basis of both sets of findings, that the IJS of school principals is influenced by their perception of the adequacy of their communications with their administrative superiors.

Professional Stimulation from Above

Administrative superiors of principals vary greatly in the degree to which they attempt to offer their subordinates constructive suggestions and professional support. Some higher administrative officials encourage, while others discourage, principals under their jurisdiction to engage in innovations. Higher administrative officials also vary in the interest they display in improving the quality of educational programs and in their willingness to consider ideas that are at variance with their own. What effect, if any, does the type of leadership a principal obtains from his superiors have on his IJS?

We have posited that among the prepotent psychological needs a

Table 5-7. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of His Superintendent's Score on Adequacy of Communications

(N = 374)*

Superintendent's Score on Adequacy of Communications	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	22%	31%	48%	8.93	4.39	124
Moderate	29	38	33	7.11	4.76	125
Low	50	30	20	5.24	4.57	125

*Data unavailable for eight cases.

$t_{(H-L)} = 6.51$; $p < .001$.

principal attempts to fulfill at work are the needs for personal growth and development and for feelings of worthwhile accomplishment. Now we contend that the degree of professional stimulation he obtains from his administrative superiors can have a bearing on the extent to which he will be able to perform his work in a manner that will permit him to fulfill these aspects of self-actualization. If a principal's superiors do not offer him any constructive ideas, if they discourage him when he wants to try out new ones, or if they reprimand him when his opinions are not in agreement with their own, then it seems reasonable to assume that a principal would be working in an environment that would inhibit role performance that would allow him to gratify his need for personal growth and development and for feelings of worthwhile accomplishment. However, if the opposite set of conditions prevailed, then a school administrator would be operating in a stimulating climate, one that rewards and encourages him to behave in a manner that would result in greater satiation of these self-actualization needs. It follows from these assumptions that:

> *Hypothesis 5-5*: *The greater the professional stimulation a principal receives from his administrative superiors, the greater the IJS of the principal.*

To test this hypothesis as it applies to the immediate administrative superiors of principals, a summary measure of the professional stimulation they receive from these functionaries was developed from their responses to the following 10 questions about the behavior of their immediate bosses. We asked the principals:

> "To what extent [always, almost always, occasionally, almost never, never] does [your immediate administrator] engage in the following kinds of behavior?"

1. Has constructive suggestions to offer principals in dealing with their major problems.
2. Discourages principals who want to try out new educational ideas.
3. Utilizes research evidence when considering solutions to educational problems.
4. Helps to eliminate weaknesses in the schools under his jurisdiction.
5. Reprimands principals whose educational ideas disagree with his own.
6. Encourages principals to maximize the different skills to be fou found in his faculty.
7. Brings to the attention of principals educational literature that is of value to them in their jobs.
8. Helps principals to understand the sources of important problems they arefacing.
9. Displays a strong interest in improving the quality of the educational program.
10. Clarifies school system policies as they apply to the principal's work.

Factor scores,[5] based on a principal components factor analysis of their replies to these items and the application of the resulting factor weights to them, were obtained for each principal. When the scores on this summary measure, Professional Stimulation from Immediate Superiors, are cross-tabulated with the principals' IJS scores, the findings support the hypothesis (Table 5-8). Those principals whose immediate administrative superiors had the highest scores on professional stimulation had the highest mean score on IJS (8.83) and principals whose bosses had the lowest scores on professional stimulation had the lowest mean scores on IJS (5.55). The difference of 3.28 units between the mean IJS scores of the principals who received the greatest and least professional stimulation from their immediate superiors is significant statistically. We conclude that the greater the professional stimulation principals receive from their immediate administrative superiors, the greater their IJS.

A similar conclusion emerged when we cross-tabulated a factor score[6] of the professional stimulation received by principals from their superintendents with the IJS scores of principals. The same procedures and questions were used to develop this score as were employed in obtaining factor scores to measure the professional stimulation received from their immediate superiors, but in this case the data had reference to the frequency with which they reported that their superintendents offered them various types of professional stimulation. When this measure was cross-classified with the principals' IJS scores, we found a positive, and statistically significant, relationship between these two variables (Table 5-9). Both sets of findings, then, offer support for the

Table 5-8. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of His Immediate Administrative Superior's Score on Professional Stimulation

(N = 374)*

Immediate Superior's Score on Professional Stimulation	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	22%	32%	46%	8.83	4.81	124
Moderate	34	34	32	6.88	4.22	125
Low	43	35	22	5.55	4.73	125

*Data unavailable for eight cases.

$t_{(H-L)} = 5.43$; $p < .001$.

Table 5-9. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of His Superintendent's Score on Professional Stimulation
(N = 373)*

Superintendent's Score on Professional Stimulation	Principal's IJS Score Low	Moderate	High	Mean IJS Score	Standard Deviation	Number of Cases
High	21%	34%	45%	8.91	4.61	128
Moderate	35	36	29	6.67	4.57	123
Low	45	30	26	5.67	4.66	122

*Data unavailable for nine cases.

$t_{(H-L)} = 5.54$; $p < .001$.

hypothesis that the greater the professional stimulation a principal received from his administrative superiors, the greater his IJS.

Social-emotional Support

Now we inquire whether the social-emotional support principals obtain from their superiors is associated with IJS. In meetings with these officials, principals may or may not be made to feel that they can speak frankly about their difficulties in managing their schools and in coping with troublesome problems. They may or may not experience a sense of support and understanding from their superiors or that their bosses have a real interest in their welfare. Furthermore, when principals are unfairly criticized by parents or teachers they may find that they obtain strong support or none at all from their superiors.

We assumed that the more principals were provided with social-emotional support from their superiors the greater would be the likelihood that they would exhibit the types of role performance that would result in their gratification of their salient psychological needs. Those who could count on this type of support from their superiors, in contrast to those who could not, would be more inclined, we reasoned, to experiment with new ideas and, in general, to explore creative solutions to their problems; the former, too, could also be expected to display more independence in their decision making than the latter. If these assumptions are tenable, then it follows that:

Hypothesis 5-6: The more social-emotional support a principal receives from his administrative superiors, the greater the IJS of the principal.

To test this hypothesis, we again used two factor scores: the first was an index of the social-emotional support principals received from their immediate superiors and the second had reference to the amount of this type of support they received from their superintendents.

The first index was based on the application of factor weights[7] derived from a principal components factor analysis of the principals' responses to the following set of 13 questions about the performance of their immediate superiors:

> "To what extent [always, almost always, occasionally, almost never, never] does [your immediate administrative superior] [your school superintendent] engage in the following kinds of behavior?"

1. Supports principals who are unfairly criticized.
2. Encourages you to see him on any school matter you may wish to discuss with him.
3. Puts you at ease when you talk with him.
4. Rubs people the wrong way.
5. Knows the right way to handle delicate interpersonal situations.
6. Shows pettiness in his behavior.
7. Displays a real interest in your welfare.
8. Displays a good sense of humor.
9. Develops a "we-feeling" in working with others.
10. Makes those who work with him feel inferior to him.
11. Can be trusted to withhold confidential information.
12. Goes out of his way to be nice to others.
13. Gets easily upset over trivial matters.

When the factor score, Social-emotional Support Received from Immediate Administrative Superior, is cross-tabulated with the IJS scores of the principals, the hypothesis receives support: the mean IJS scores rise monotonically from a low of 5.45 for those principals whose immediate bosses offer the least social-emotional support to a high of 8.74 for those whose immediate superiors provide greatest support (Table 5-10). The difference of 3.29 between the mean scores of the extreme groups is significant statistically.

The findings also revealed that the second factor score,[8] Social-emotional Support Received from Superintendent, which was derived from their replies to the 13 questions about their superintendent's performance, is also positively related to their IJS: principals whose superintendents were categorized in the lowest group with respect to support had the lowest mean IJS score (5.43) and those whose superintendents were in the highest group had the highest IJS score (8.90) (Table 5-11). The difference of 3.47 units between their IJS scores is significant statistically.

We interpret the two sets of findings as supporting the hypothesis that the social-emotional support principals receive from their administrative superiors is positively related to IJS.

Routine Managerial Support

We have seen that the professional stimulation and the social-emotional support received by principals from both their immediate administrative superiors and their superintendents influence their IJS.

Table 5-10. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of His Immediate Administrative Superior's Score on Social-emotional Support

(N = 374)*

Immediate Superior's Score on Social-emotional Support	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	24%	29%	47%	8.74	4.52	124
Moderate	30	36	34	7.09	4.76	124
Low	44	37	19	5.45	4.50	126

*Data unavailable for eight cases.

$t_{(H-L)} = 5.77$; $p < .001$.

Table 5-11. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of His Superintendent's Score on Social-emotional Support

(N = 372)*

Superintendent's Score on Social-emotional Support	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	22%	29%	49%	8.90	4.57	126
Moderate	33	36	31	6.87	4.66	122
Low	47	34	20	5.43	4.61	124

*Data unavailable for 10 cases.

$t_{(H-L)} = 5.97$; $p < .001$.

We now contend that how a principal's bosses handle their routine managerial tasks can also influence his IJS. Inept performance on the part of the principal's superiors may be presumed to create difficulties for him. If the superintendent or an assistant superintendent, for example, run their offices in an inefficient manner, a principal under their jurisdiction will be exposed to unnecessary bottlenecks in managing his own office and in coping with his problems. If higher administrators require a principal to engage in needless paper work, he will have less time to devote to educational tasks which he views as most important.

If we assume that a high degree of routine managerial support from the principal's administrative superiors will increase the likelihood of a principal's engaging in consistent patterns of role performance, and if we assume that the more consistent his performance the more he can satiate one of his basic self-actualization needs, then it follows that:

Hypothesis 5-7: The greater the routine managerial support a principal receives from his administrative superiors, the greater the IJS of the principal.

To test this hypothesis, we again shall use two factor scores. The first is an index of the managerial support the principal receives from his immediate administrative superior and the second a measure of the amount of this type of support he obtains from his superintendent.[9] These factor scores were developed through the application of the same procedures employed to measure the degree of social-emotional support principals obtained from their immediate superiors and their superintendents and were based on their responses to the following 10 items:

> "To what extent [always, almost always, occasionally, almost never, never] does [your immediate administrative superior] [your school superintendent] engage in the following kinds of behavior?"

1. Clarifies school system policies as they apply to the principal's work.
2. Keeps his office running smoothly.
3. Handles paper work associated with his job efficiently.
4. Shows poor business sense in financial matters.
5. Requires principals to engage in unnecessary paper work.
6. Cuts through "red tape" when fast action is needed.
7. Does everything he can to minimize the problems I face in opening the school.
8. Upsets my work through his poor planning.
9. Makes principal's life difficult because of his administrative ineptitude.
10. Runs meetings and conferences in a disorganized fashion.

When the factor score, Routine Managerial Support Received from Immediate Administrative Superior, was cross-tabulated with the principal's IJS scores, the hypothesis receives support. The highest mean IJS score (8.50) was received by principals whose immediate bosses offered greatest routine administrative support and the lowest mean IJS score (5.52) was obtained by those whose superiors gave least support of this kind (Table 5-12). The same conclusion emerged from the findings about

Table 5-12. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of His Immediate Administrative Superior's Score on Routine Administrative Support

(N = 374)*

Immediate Superior's Score on Routine Administrative Support	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	27%	30%	43%	8.50	4.60	125
Moderate	30	33	37	7.23	4.70	125
Low	44	40	19	5.52	4.60	124

*Data unavailable for eight cases.

$t_{(H-L)} = 5.11$; $p < .001$.

the relationship between the factor score, Routine Managerial Support Received from the Superintendent, and intrinsic job satisfaction (Table 5-13). Since the findings in both Tables 5-12 and 5-13 are in the predicted direction and significant statistically, we interpret them as supporting the hypothesis.

Importance Attributed to the Principal's Work by Higher Administrators

The final hypothesis we shall test in this chapter deals with the impact of the importance a principal perceives his higher administrators attribute to his work on IJS. The reasoning in this case is quite straightforward.

We assumed that the more a principal perceived that his superiors attributed a great deal of importance to his job, the greater the likelihood that he would exhibit role performance characterized by successful completion of tasks and creativity. And since we have assumed that the degree to which an administrator exhibits behavior of these kinds, the greater his IJS, it follows that:

> Hypothesis 5-8: The more importance a principal perceives his administrative superiors attribute to his work, the greater the IJS of the principal.

Two factor scores, one with reference to the importance a principal perceives his immediate administrative superiors attribute to his work and the other dealing with his view of his superintendent in this respect were used to test the hypothesis. The same procedures were used to

Table 5-13. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of His Superintendent's Score on Routine Administrative Support

$(N = 372)^*$

Superintendent's Score on Routine Administrative Support	Principal's IJS Score Low	Principal's IJS Score Moderate	Principal's IJS Score High	Mean IJS Score	Standard Deviation	Number of Cases
High	22%	30%	48%	8.83	4.52	127
Moderate	34	34	32	7.03	4.71	122
Low	46	35	20	5.38	4.58	123

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*Data unavailable for 10 cases.

$t_{(H-L)} = 6.00$; $p < .001$.

derive these factor scores as were employed to obtain others described earlier in the chapter. The two summary measures were based on the principals' responses to the following questions:

> "To what extent [always, almost always, occasionally, almost never, never] does [your immediate administrative superior] [your school superintendent] engage in the following kinds of behavior?"

1. Gives principals the feeling that they can make significant contributions to improving the classroom performance of teachers.
2. Gets principals to upgrade the performance standards of their school.
3. Gives principals the feeling that their work is an "important" activity.
4. Treats principals as professional workers.
5. Takes a strong interest in my professional development.
6. Makes principals' meetings a valuable educational activity.

When we related the first factor score,[10] Importance Attributed to Principal's Work by Immediate Administrative Superior, to the IJS scores of the principals, we found support for the hypothesis (Table 5-14). Forty-seven per cent of the principal who perceived their immediate administrative superiors as attributing most importance to their work had high IJS scores in comparison to 26 per cent who viewed them as attributing least importance to it. Principals in the former group had a considerably higher mean IJS score (8.66) than those in the latter group (5.76) and the difference of 2.90 is significant statistically.

Table 5-14. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of His Immediate Administrative Superior's Score on Importance Attributed to Principal's Work

(N = 374)*

Immediate Superior's Score on Importance Attributed to Principal's Work	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	22%	31%	47%	8.66	4.70	147
Moderate	34	43	23	6.41	4.38	102
Low	45	30	26	5.76	4.69	125

*Data unavailable for eight cases.

$t_{(H-L)} = 5.10$; $p < .001$.

The same findings emerged when we related the factor score,[11] Importance Attributed to Principal's Work by the Superintendent, to the principals' IJS scores (Table 5-15). Since both sets of findings are in the predicted direction and are significant statistically, we conclude that there is a positive relationship between the importance a principal perceives his administrative superiors attribute to his work and his IJS.

Table 5-15. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of His Superintendent's Score on Importance Attributed to Principal's Work

(N = 373)*

Superintendent's Score on Importance Attributed to Principal's Work	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	18%	34%	48%	8.92	4.31	128
Moderate	31	41	28	7.04	4.60	115
Low	51	25	24	5.39	4.82	130

*Data unavailable for nine cases.

$t_{(H-L)} = 6.19$; $p < .001$.

Notes and References for Chapter Five

1. For the item means, standard deviations, and weights used in computing the score, Autonomy Granted by Superordinates, see Appendix B (Table B-2).

2. For the item means, standard deviations, and weights used in computing the score, Adequacy of the Higher Administration's Decision-Making Process, see Appendix B (Table B-3).

3. For the item means, standard deviations, and weights used in computing the score, Adequacy of Communications from Immediate Administrative Superior, see Appendix B (Table B-4).

4. For the item means, standard deviations, and weights used in computing the score, Adequacy of Communications from Superintendent, see Appendix B (Table B-5).

5. For the item means, standard deviations, and weights used in computing the score, Professional Stimulation from Immediate Administrative Superior, see Appendix B (Table B-6).

6. For the item means, standard deviations, and weights used in computing the score, Professional Stimulation from Superintendent, see Appendix B (Table B-7).

7. For the item means, standard deviations, and weights used in computing the score, Social-emotional Support received from Immediate Administrative Superior, see Appendix B (Table B-8).

8. For the item means, standard deviations, and weights used in computing the score, Social-emotional Support received from Superintendent, see Appendix B (Table B-9).

9. For the item means, standard deviations, and weights used in computing the score, Routine Managerial Support Received from Immediate Administrative Superior, see Appendix B (Table B-10). For the same information about the score, Routine Managerial Support Received from Superintendent, see Appendix B (Table B-11).

10. For the item means, standard deviations, and weights used in computing the score, Importance Attributed to Principal's Work by Immediate Administrative Superior, see Appendix B (Table B-12).

11. For the item means, standard deviations, and weights used in computing the score, Importance Attributed to Principal's Work by Superintendent, see Appendix B (Table B-13).

Chapter 6: Relationships with Subordinates

The hypotheses examined in the preceding chapter were concerned with circumstances principals encounter in their relationships with administrative superiors which our theoretical formulation of intrinsic job satisfaction led us to predict would have an impact on IJS. Now we turn to a series of hypotheses about conditions of the principal's relations with his teachers that we anticipated would be related to IJS.

Teachers' Classroom Performance

The first hypothesis is concerned with the relationship between the principal's perception of the classroom performance of his teachers and his intrinsic job satisfaction.

We have assumed any organizational condition that will serve as an impediment to a principal's exhibiting patterns of role performance that will allow him to gratify his prepotent psychological needs will diminish his intrinsic satisfaction with his work. One such circumstance is his assessment of the calibre of the teaching performance of his faculty. It could be argued that a principal with a relatively low assessment of the quality of his staff's performance will exhibit higher IJS than one with a higher assessment because he would have greater opportunity to display creativity in his behavior and to influence their actions, conditions that could lead to the gratification of his self-actualization needs. Although for some principals, a relatively low assessment of staff may serve to motivate these types of behavior, in view of the heavy demands on the energies and time of principals, we reasoned that, in general, a principal with a relatively low evaluation of the performance his staff would be less predisposed than one who has a relatively high estimation of it to behave in ways that would lead to the satiation of his prepotent psychological needs. One who had a relatively low assessment of the ability of his staff would be less inclined than one who assessed them more favorably to propose new programs or practices to his teachers because of his lack of confidence in their abilities to implement them. Furthermore, a principal who held a low assessment of his teachers' performance would probably unconsciously betray it in his interactions with them. In consequence, the staff would be less willing to give him cooperation and support and thereby lessen his chances to experience successful task accomplishment in any efforts he made to influence them. From these lines of reasoning, it follows:

Hypothesis 6-1: The higher a principal's evaluation of the classroom performance of his teachers, the greater his IJS.

To test this hypothesis a principal components factor analysis was performed on the principals' responses to the seven questions about the classroom behavior of their teachers presented in Table 6-1. The resulting factor weights (see column 4, Table 6-1) were then applied to the administrators' replies and a "factor score" obtained for each principal's perceptions of the quality of teacher performance in his school.

Table 6-2 reports the relationship between the principals' view

Table 6-1. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of 382 Principals to Compute Summary Measures for Their Evaluation of the Classroom Performance of Their Teachers

Item*	Mean	Standard Deviation	Factor Weight
The per cent of teachers who according to the principal:			
1. Do textbook teaching only.	13.01	16.02	-0.751
2. Waste a lot of time in their classroom activities.	10.70	14.43	-0.695
3. Plan their courses so that different types of students can benefit from them.	80.09	19.98	0.646
4. Have mastered the skills necessary to present their subject matter with high competence.	75.18	20.39	0.606
5. Do their work in an apathetic manner.	7.57	10.80	-0.499
6. Are not able to control their students in their classes.	5.05	10.49	-0.483
7. Appear unsure about what they are supposed to be doing.	7.25	12.71	-0.464

*Items ordered in terms of decreasing magnitude of factor weight.

Table 6-2. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of the Teachers' Score on Quality of Classroom Performance

(N = 379)*

Teachers' Score on Quality of Classroom Performance	Principal's IJS Score Low	Moderate	High	Mean IJS Score	Standard Deviation	Number of Cases
High	26%	34%	39%	8.09	4.94	125
Moderate	36	31	33	6.78	4.80	127
Low	38	35	28	6.43	4.47	127

*Data unavailable for three cases.

$t_{(H-L)} = 2.79; p < .01.$

of the quality of his staff's performance and IJS. The findings provide support for the hypothesis: the higher the principal's assessment of the classroom performance of his teachers, the greater his IJS. The mean IJS score of the principals who were classified as having the most positive view of teachers' performance is 8.09 as compared to 6.43 for the administrators with the least positive view of their staffs. The difference of 1.66 is significant statistically. We, therefore, conclude that there is a positive relationship between a principal's evaluation of the classroom performance of his teachers and his IJS.

Staff Orientation to Innovation

A second condition that our theoretical formulation led us to anticipate would exert an impact on the intrinsic job satisfaction of a principal was his view of his staff's interest in innovations.

In recent years, considerable stress has been placed on the obligation of principals to serve as change agents in their schools. They have been urged by their professional associations and their superiors to take the initiative in encouraging their teachers to adopt new curriculum materials and teaching techniques. Their professional publications are filled with stories of principals who have been successful in this aspect of their administrative duties. In view of this emphasis on innovative role performance, it seems reasonable to assume that experiencing success in introducing changes into their schools would especially serve to gratify the principals' self-actualization need for worthwhile accomplishment.

The extent to which a principal would attempt to serve as a change agent, and thus have the opportunity to experience success in this kind of endeavor, would we reasoned, be in large part dependent on his conception of his teachers' attitudes toward innovations. If he perceived them as holding strong negative feelings about educational change, then the likelihood of his serving in an innovative capacity would be minimal; if they had more positive feelings toward it, then the chances that he would behave in this way would be much greater. On the basis of this reasoning, it follows that:

Hypothesis 6-2: The more a principal perceives his staff as interested in innovations, the greater his IJS.

To test this hypothesis, we developed a summary measure of the principals' perception of their teachers' attitudes toward innovations based on their responses to the questions presented in Table 6-3. A principal components fact or analysis was performed on the principals' replies and the resulting factor weights (column 4, Table 3) were applied to them to obtain "factor scores."

When we cross-tabulate this index of the principals' perception of their teachers' attitudes toward innovations with their IJS scores, the findings support the hypothesis: the more positive a principal perceives the teachers' attitudes toward innovation the greater his IJS (Table 6-4). The positive trend in the data is seen in the mean IJS scores in column 5; it is also seen in column 4, which shows the proportion of principals highest in IJS at each of three levels of their assessment of their teachers' interest in innovations. When we compare the principals whose

Table 6-3. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of 382 Principals to Compute Summary Measures for Their Perception of Their Teachers' Interest in Educational Innovations

Item*	Mean	Standard Deviation	Factor Weight
The per cent of teachers who according to the principal:			
1. Give you full support when you made a decision to alter the educational program.	88.99	12.22	0.812
2. Usually drag their feet when you suggest changes in established routine.	10.30	11.78	-0.778
3. Try out new ideas in their classrooms.	49.53	27.87	0.672

*Items ordered in terms of decreasing magnitude of factor weight.

Table 6-4. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of the Teachers' Score on Interest in Innovation

(N = 379)*

Teachers' Score on Interest in Innovation	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	25%	34%	41%	8.13	4.44	126
Moderate	34	36	30	6.92	5.03	127
Low	42	29	29	6.22	4.69	126

*Data unavailable for three cases.

$t_{(H-L)} = 3.32; p < .001$

staffs had the lowest and highest scores on interest in innovations, we find that 41 per cent of the former in contrast to 29 per cent of the latter had the highest IJS scores (column 4). The difference of 1.91 between the mean IJS score of the highest group (8.13) and that of the lowest group (6.22) is significant statistically. We interpret the findings as offering support for Hypothesis 6-2.

Teachers' Personal Support of the Principal

There was considerable variability in the responses of principals when they were asked questions designed to ascertain the proportion of their teachers who gave them strong personal support. Some principals replied that the great majority of their teachers,and others that only a minority, had a sense of personal loyalty to them, spontaneously backed their major decisions, willingly gave extra time in helping them carry out their school programs, or would support them when they were unfairly criticized.

We reasoned that a principal who perceived little personal support from his staff would find it difficult to satiate his self-actualization needs. If most of his teachers were reluctant to support his decisions, it seems reasonable to assume that he would be exposed to considerable difficulty in implementing them. If he perceived that a substantial segment of his teachers were unwilling to devote the extra time and energy required to introduce changes he would like to introduce, he probably would devote little effort to this type of activity. If he felt that few of his teachers had a strong sense of loyalty to him, he would show little willingness "to stick his neck out" by embarking on new courses of action. He would be reluctant to change the status quo because he could not count on the cooperation and support of his staff in implementing his ideas or in dealing with parents or higher administrators who might question their value. Thus, the less the personal support a principal perceived he had from his staff, the less we anticipated that his role performance would be characterized by independence of action and creativity, two features of his performance that we assumed would serve to enhance the chances of fulfilling his prepotent psychological needs. From this line of reasoning, it follows that:

Hypothesis 6-3: The greater the personal support a principal perceives he receives from his staff, the greater his IJS.

To test this hypothesis, we shall use a summary measure of the principals' responses to the four questions reported in Table 6-5. A principal components factor analysis was performed on their responses, and the resulting factor weights (column 4, Table 6-5) were applied to them to obtain a "factor score" of the principal's perception of the personal support he receives from his staff.

When the scores on this Factor, Personal Support from Staff, were cross-tabulated, with the principals' IJS scores, the hypothesis receives support (Table 6-6); those who received the most support had higher scores on IJS than those who received least support. The difference between the mean IJS scores of those who received the most and least

Table 6-5. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of 382 Principals to Compute Summary Measures for Their Perception of the Personal Support Received from the Staff

Item*	Mean	Standard Deviation	Factor Weight
The per cent of teachers who according to the principal:			
1. Spontaneously back your decisions.	87.15	14.37	0.845
2. Have a sense of personal loyalty to you.	84.41	19.66	0.798
3. Would stand behind you if you were unfairly criticized.	89.67	15.25	0.717
4. Willing to give extra time in helping you effect your school program.	76.93	23.81	0.715

*Items ordered in terms of decreasing magnitude of factor weight.

Table 6-6. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of the Teachers' Score on Personal Support of Principal

(N = 382)

Teachers' Score on Personal Support of Principal	Principal's IJS Score Low	Moderate	High	Mean IJS Score	Standard Deviation	Number of Cases
High	24%	37%	39%	8.09	4.49	126
Moderate	38	32	30	6.72	5.11	128
Low	38	31	31	6.47	4.57	128

$t_{(H-L)} = 2.87$; $p < .001$

support (8.09 versus 6.47) is significant statistically. Hence, we conclude that the greater the personal support a principal perceives he receives from his staff, the greater his intrinsic job satisfaction.

Interpersonal Relationships in the School

There was also considerable variation, according to the reports of the principals, in the quality of interpersonal relations among the faculty in their schools. For example, some principals indicated that only a minority of their teachers remained aloof from their colleagues while others said that most of their faculty could be described in this way. There was also considerable variation in the administrators' replies when we asked them about the proportion of their teachers who get along amicably with their supervisors, cooperate with their colleagues, help new teachers, and engage in backbiting and gossip.

We reasoned that the more a principal perceived his school as marked by strained interpersonal relationships the more difficult he would find it to fulfill his self-actualization needs in his role performance. In a work environment characterized by strained interpersonal relationships, he would be exposed to greater obstacles in his efforts to influence his faculty and to achieve school objectives than in one in which staff relationships were more harmonious. Furthermore, in the former situation he would have to devote a great deal of his time in efforts to minimize staff quarrels, whereas in the latter, he could expend much more of it on creative activities and those that would tend to maximize the potentialities of his staff. From this line of reasoning, it follows that:

Hypothesis 6-4: The more harmonious a principal perceives the interpersonal relations among his staff, the greater his IJS.

We test this hypothesis by using a summary measure of the principals' perception of harmony in staff relationships developed from their replies to the five questions presented in Table 6-7. A principal components factor analysis was performed on their responses, and the resulting factor weights (see Column 4, Table 6-7) were applied to their replies to secure "factor scores."

The data reveal that this hypothesis does not receive support (Table 6-8). Although the highest mean IJS score was received by principals who perceived staff relationships as most harmonious, those who viewed them as least harmonious did not receive the lowest mean IJS score. Furthermore, the difference between the mean IJS scores of the extreme groups is not significant statistically. We conclude that the findings offer no support for Hypothesis 6-4.

Teachers' Commitment

Until now, we have examined hypotheses about the association with IJS of the principal's perception of his teachers' classroom performance, their orientation to innovation, their personal support, and their interpersonal relationships. What about his perception of staff commitment to their responsibilities? Is it related to the principal's IJS?

Table 6-7. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of 382 Principals to Compute Summary Measures for Their Perception of the Extent of Harmony in Interpersonal Staff Relationships

Item*	Mean	Standard Deviation	Factor Weight
The per cent of teachers who according to the principal:			
1. Remain aloof from their colleagues.	4.17	7.79	-0.718
2. Engage in backbiting and gossip.	5.54	9.69	-0.701
3. Help new teachers become acclimated to the way things are done.	13.01	16.03	0.648
4. Cooperate with their colleagues.	92.22	12.59	0.543
5. Get along amicably with their supervisors.	92.90	12.26	0.354

*Items ordered in terms of decreasing magnitude of factor weight.

Table 6-8. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of the Teachers' Score on Quality of Interpersonal Relations

(N = 382)

Teachers' Score on Quality of Interpersonal Relations	Principal's IJS Score Low	Moderate	High	Mean IJS Score	Standard Deviation	Number of Cases
High	28%	33%	39%	7.66	5.05	128
Moderate	37	37	26	6.58	4.01	127
Low	36	29	35	7.02	5.14	127

$t_{(H-L)} = 0.997$; $p > .32$.

If we assume that the extent to which principals engage in role performance characterized by creativity and the amount of effort they devote to their responsibilities are positively influenced by their perception of their staff's commitment to their work; and if we further assume that role performance characterized by creativity and successful completion of tasks increases IJS, then it follows that:

Hypothesis 6-5: The more the principal perceives that his teachers are committed to their work, the greater the IJS of the principal.

To measure the principals' view of staff commitment, we shall use a summary measure based on their replies to the nine questions presented in Table 6-9. The factor weights (column 4, Table 6-9) obtained from a principal components analysis of their replies to these questions were used in calculating fact or scores for the principals.

Table 6-10 reveals the findings when the scores on this factor, Teacher Commitment, were cross-tabulated with the principals' IJS scores. The administrators whose teachers were classified as in the top group on commitment were much more likely than those in the bottom group to express high IJS (43 per cent versus 26 per cent). The difference in the mean IJS scores of the administrators in the top group (8.39) and the bottom group (5.94) is significant statistically. We conclude, therefore, that Hypothesis 6-5 receives impirical support.

Table 6-9. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of 382 Principals to Compute Summary Measures for Their Perception of Their Teachers' Commitment to Their Work

Item*	Mean	Standard Deviation	Factor Weight
The per cent of teachers who according to the principal:			
1. Act as if they get real enjoyment from their work.	82.42	16.37	0.730
2. Get real satisfaction out of devoting time and energy to problems of young persons.	79.74	19.42	0.691
3. Complain about the lack of stimulation in their work.	6.85	12.79	-0.631
4. Complain about how hard their students are to work with.	12.55	17.02	-0.580
5. Are committed to doing the best job of which they are capable.	84.02	17.60	0.466
6. Express dissatisfaction with methods of supervision.	6.66	13.04	-0.464
7. Stayed out of work one or more times during the academic year when they were not actually sick.	3.38	8.12	-0.455
8. Complain about the physical plant of the school.	12.07	23.16	-0.414
9. Are planning to leave the field of education.	3.15	8.34	-0.455

*Items ordered in terms of decreasing magnitude of factor weight.

Table 6-10. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of the Teachers' Score on Commitment to Their Work

(N = 379)*

Teachers' Score on Commitment to Work	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	24%	33%	43%	8.39	4.52	127
Moderate	34	35	31	6.94	4.70	126
Low	43	31	43	5.94	4.83	126

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*Data unavailable for three cases.

$t_{(H-L)} = 4.18; p < .001.$

Chapter 7: Personal Characteristics

In the two preceding chapters we have examined hypotheses about organizational conditions confronting a principal that a needs-gratification theory of intrinsic job satisfaction led us to anticipate would be associated with IJS. Now we turn to hypotheses about his own personal attributes that also might be related to it. Each of the hypotheses to be tested specifies a characteristic on which principals may vary, that on the basis of our theoretical formulation, we expected to be associated with his IJS.

Self-Conception of Abilities

Our proposed explanation of IJS focuses attention on circumstances that will increase or decrease the likelihood that a principal's role performance will be characterized by four attributes: independence in decision-making, creativity, successful completion of tasks, and consistency. We now contend that one condition of this kind is his assessment of his own abilities as an educational administrator.

We assumed that if a manager of an organization had a relatively high evaluation of his administrative skills, he would be more likely than one with a lower self-assessment to exhibit the confidence required for independence in his decision-making and for adopting imaginative and innovative approaches to cope with organizational problems. In addition, we assumed that one who entertained a relatively high evaluation of his capabilities would be more likely to possess the assurance needed to carry out his responsibilities in an effective manner and would be less likely to be inconsistent in his actions than one with a relatively low assessment of his capabilities. And, other things being equal, we assumed that behavior of these kinds will lead to the gratification of his prepotent psychological needs, and thereby serve to increase his IJS. It follows from this line of reasoning that:

Hypothesis 7-1: *The higher a principal's evaluation of his skills as an educational administrator, the greater his IJS.*

To test this hypothesis, we shall use the principals' self-assessment of their skills in three major aspects of their work: 1) their ability to offer educational leadership to their staffs, 2) their ability to deal with their routine managerial tasks, and 3) their skill in coping with human relations problems of their organizations.

The measure of the principal's self-assessment of their ability to offer educational leadership to their staffs used to test the hypothesis was developed from their responses to a Self-evaluation Instrument based on 23 aspects of their work. Many of the items dealt with performance bearing on educational leadership. When the principals' responses to this instrument were factor analyzed, 4 factors were isolated, and one of them was designated as Self-assessment of Educational Leadership. In measuring the 8 items contributing to this factor, we asked the principals: How would you rate ["outstanding," "excellent," "good," "fair," "poor," "very poor"] your performance in:

1. Getting *experienced* teachers to upgrade their performance.
2. Improving the performance of *inexperienced* teachers.

3. Getting teachers to use new educational methods.
4. Giving leadership to the instructional program.
5. Communicating the objectives of the school program to the faculty.
6. Getting teachers to coordinate their activities.
7. Knowing about the strengths and weaknesses of teachers.
8. Maximizing the different skills found in a faculty.[1]

When the principals' scores on this factor are cross-tabulated with their Intrinsic Job Satisfaction Scores, the findings support the hypothesis (Table 7-1). The percentage of principals with high IJS scores in the top self-assessment group is over three and a half times as large as the proportion in the bottom self-assessment group. Principals with the highest self-assessment scores on educational leadership have the highest mean intrinsic job satisfaction score (9.54) and those with the lowest self-assessment scores have the lowest mean score (5.91). The difference of 3.63 between the mean intrinsic job satisfaction scores of the principals who placed highest and lowest in self-assessment is significant statistically.

The principals in our sample also varied considerably in their evaluation of their ability to deal effectively with their routine managerial tasks. Is their self-assessment in this respect also positively related to Intrinsic Job Satisfaction?

The index of the principals' assessment of their routine managerial skills was also derived from the factor analysis of their responses to the Self-evaluation Instrument. A second factor, Self-assessment on

Table 7-1. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Four Levels of His Score on Self-Assessment of Educational Leadership

(N = 379)*

Score on Self-Assessment of Educational Leadership	Principal's IJS Score Low	Moderate	High	Mean IJS Score	Standard Deviation	Number of Cases
Highest	21%	18%	61%	9.54	4.57	83
Moderately High	25	40	35	7.69	3.93	92
Moderately Low	36	39	25	6.73	4.50	98
Lowest	49	34	17	5.91	4.84	106

*Data unavailable for three cases.

$t_{(H-L)} = 6.68$; $p < .001$.

Skills in Dealing with Routine Managerial Tasks, was based upon the following 5 items:

1. Keeping the school office running smoothly.
2. General planning for the school.
3. Directing the work of administrative assistants.
4. Cutting "red-tape" when fast action is needed.
5. Publicizing the work of the school.[2]

Table 7-2 shows the findings when we cross-tabulated the Intrinsic Job Satisfaction scores of the principals with their scores on the factor of Self-assessment in Dealing with Routine Managerial Tasks. It reveals that the higher their self-evaluation, the greater their intrinsic job satisfaction. The difference of 2.46 units in the mean IJS scores of the principals who placed highest in self evaluation (8.49) and those who were lowest (6.03) is significant statistically.

It is of interest to note that the effect on intrinsic job satisfaction of self-assessment on educational leadership is apparently greater than self-assessment on routine managerial skills. The difference between the mean Intrinsic Job Satisfaction scores of the highest and lowest groups on self-assessment of educational leadership is 3.63 in comparison to 2.46 for the top and bottom groups on self-assessment on ability in dealing with routine managerial tasks.

The index of the principals' self-assessment of their human relations skills was also obtained through the factor analysis of their replies to the Self-evaluation Instrument. The third factor, Self-assessment on Human Relations Skills, was based upon the following 5

Table 7-2. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Four Levels of His Score on Self-Assessment in Dealing with Routine Managerial Tasks

(N = 379)*

Score on Self-Assessment in Dealing with Routine Managerial Tasks	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Highest	26%	29%	45%	8.49	5.23	100
Moderately High	31	31	38	7.48	4.65	96
Moderately Low	40	32	28	6.14	4.39	95
Lowest	38	42	20	6.03	4.31	88

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[*] Data unavailable for three cases.

$t_{(H-L)} = 3.48;\ p < .001.$

items:

1. Handling delicate interpersonal situations.
2. Obtaining parental cooperation with the school.
3. Resolving student discipline problems.
4. Developing esprit de corps among teachers.
5. Handling parental complaints.[3]

The findings again support the hypothesis when this self-evaluation index is related to IJS (Table 7-3). The mean intrinsic job satisfaction score was 5.84 for principals in the lowest category on self-assessment of human relations skills; it rises to 6.34 and 7.84 for the next two categories, and then rises again to 8.27 for the highest category. The difference of 2.43 between the mean scores of principals in the lowest and highest self-assessment categories is significant statistically. We conclude, therefore, on the basis of the three sets of evidence presented in this section that a principal's evaluation of his skills as an educational administrator is positively related to his IJS.

Conformity to Role Expectations

In Chapters 5 and 6 we considered how the role performance of the principal's superiors and his subordinates can affect his intrinsic job satisfaction. Now we examine how his own role performance may influence it. We have posited that circumstances that will serve to inhibit or enhance a principal's gratification of his needs for autonomy and feelings of worthwhile accomplishment will influence his IJS. A condition

Table 7-3. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Four Levels of His Score on Self-Assessment of Human Relations Skills

(N = 379)*

Score on Self-Assessment of Human Relations Skills	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Highest	25%	30%	45%	8.27	4.74	91
Moderately High	27	35	38	7.84	4.69	96
Moderately Low	38	37	26	6.34	4.38	96
Lowest	44	31	25	5.84	4.89	93

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[*] Data unavailable for three cases.

$t_{(H-L)} = 6.68$; $p < .001$.

of this kind, we reasoned, is the degree to which he is able to conform to his own definition of his role.

We have assumed in our analyses thus far that the general duties of all principals are essentially the same. That is, they are all required to engage in tasks such as supervision of the instructional program, handling the routine administrative affairs of their schools, representing their organization in its relationships with parents and school officials. We now introduce the assumption that principals vary in the expectations they apply to their role performance with respect to their general duties. To illustrate: some may believe that their general responsibility for supervision of the instructional program requires them to exercise a high degree of formal control over the classroom performance of their teachers whereas others may define their obligation in this respect as limited to dealing with instructional problems faculty members bring to their attention. Similarly, principals may vary in their role definitions with respect to what constitutes "appropriate role" performance when they work with groups of parents or teachers. If, as we have assumed, principals vary in the expectations or evaluative standards they apply to their own performance, then their feelings of worthwhile accomplishment will be a function of the degree to which they are able to conform to their own role definitions for their role performance. That is, the more their behavior conforms to their own standards, the greater the sense of worthwhile accomplishment they will derive from it. Furthermore, the greater the disparity between a principal's actual role performance and how he believes he should behave, the less he will be able to gratify his need for autonomy since he will not be able to behave in accord with his own desires. And since we have assumed that the more a principal is able to gratify his needs for autonomy and self-actualization, the greater his intrinsic job satisfaction, it follows that:

Hypothesis 7-2: The more a principal's role performance conforms to his own definition of his role, the greater his IJS.

To test this hypothesis we developed indices of the degree to which the principals conformed to their definition of their roles in the three following areas: closeness of supervision of teachers, support of innovations, and parent involvement in school affairs.

Our index of the principals' conformity to their role definition in regard to closeness of supervision was based on a comparison of their responses to two questions about eight different items dealing with supervisory practices. The first question was: "What obligation ("absolutely must," "preferably should," "may or may not," "preferably should not," "absolutely must not") do you feel as principal of your school to engage in the following activities?" The second question was: "How frequently ("always," "almost always," "occasionally," "almost never" "never") do you engage in the following kinds of activities? The eight items to which they responded were:

1. Require that teachers discuss their major classroom problems with the principal.
2. Ask teachers to report all major conferences with parents to the principal.
3. Require teachers to keep the principal informed about "problem"

children in their classrooms.

4. Closely direct the work of teachers who are likely to experience difficulty.
5. Require that teachers' classroom behavior conform to the principal's standards.
6. Check to see that teachers prepare written lesson plans.
7. Know what is taking place in most classrooms during most of the day.
8. Determine what the objectives of the guidance program should be in the school.[4]

Seven of the eight questions focus on maintaining some kind of control over the teachers' performance of their professional activities. Some of the behavior described by the items depend on the teacher's initiative; for example, reporting parental conferences and keeping the principal informed about problem children. Others imply initiative on the principal's part, for example, visiting classes regularly and checking written lesson plans. The eighth question, "How frequently does your principal determine what the objectives of the guidance program should be in the school?" is not as obviously related to the control of the teachers' tasks, but the guidance program can impinge on the teacher-pupil relationship in a number of ways; hence its relevance.

The measurement procedure used to derive the index of the principal's conformity to his role definition consisted of two steps. First, for each of these eight items, a discrepancy score was calculated between the principal's response to the "expectations" and "behavior" questions. The scoring procedure used was as follows: any item for which the "expectations" response was "may or may not," was given a zero difference score, regardless of the nature of the behavior response. The other combination of responses were scored as follows:

"Expectations" Response	"Behavior" Response	Discrepancy Score
Preferably should	Always	0
" "	Almost always	0
" "	Occasionally	1
" "	Almost never	2
" "	Never	3
Absolutely must	Always	0
" "	Almost always	1
" "	Occasionally	2
" "	Almost never	3
" "	Never	4
Preferably should not	Always	3
" " "	Almost always	2
" " "	Occasionally	1
" " "	Almost never	0
" " "	Never	0
Absolutely must not	Always	4
" " "	Almost always	3
" " "	Occasionally	2
" " "	Almost never	1
" " "	Never	0

The second step was to compute a mean discrepancy score for each principal from his discrepancy scores on the eight items. It is this mean score that will be used as an index of the principal's conformity to his role definition with respect to closeness of supervision.

When the principals' scores on this index of conformity are cross-tabulated with their IJS scores, the findings reveal support for the hypothesis (Table 7-4). Principals with the highest conformity scores had the highest mean score on IJS (8.22) and those with the lowest conformity scores had the lowest mean score on IJS (6.70). The difference of 1.52 units between the mean IJS scores of the principals who placed highest and lowest in conformity to their role definitions is significant statistically. We interpret the findings as supporting the hypothesis.

We used the same procedure described above to develop an index of conformity to role definition with respect to support of innovations. The six items to which the principals gave "expectations" and "behavioral" responses were:

1. Encourage the staff to learn about and try out some of the "new ideas" coming from schools of education.
2. Encourage teachers to consider adopting new educational ideas which have been tried out in other communities and found to be successful.
3. Encourage schools of education to conduct experimental research in the school.
4. Attempt to secure teachers in the school who are interested in

Table 7-4. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of Conformity to His Role Definition with Respect to Closeness of Supervision

(N = 380)*

Score on Conformity to Principal's Role Definition	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	25%	33%	43%	8.22	4.82	89
Moderate	38	34	29	6.84	4.83	139
Low	34	34	32	6.70	4.58	152

*Data unavailable for two cases

$t_{(H-L)} = 2.44;\ p < .01$

experimenting with new educational ideas.

5. Seek out new ideas to introduce into the school's program.
6. Give additional free time to teachers who are trying out new ideas in their classes.[5]

Table 7-5 shows that when the principals scores on this measure of their conformity to their role definition is cross-tabulated with their IJS scores, the hypothesis again receives support. The mean IJS score is lowest (5.99) for principals who least conform to their role definition with respect to support of innovations and highest (8.07) for those who conform to it the most. The difference in the mean IJS scores of the two extreme groups of 2.08 is statistically significant.

When we tested the hypothesis with an index of conformity to role definition with respect to involvement of parents in school affairs,[6] using the same measurement procedures employed in deriving the other indices of conformity we have considered, the data did not provide support for the hypothesis (Table 7-6). Although the lowest mean IJS score was received by those principals who conformed least to their role definitions, the highest IJS score was not obtained by those highest in conformity; it was secured by principals in the "middle group" on conformity.

We conclude, therefore, that a principal's conformity to his own definition of his role with respect to closeness of supervision and support of innovations is positively associated to IJS but that conformity to his role expectations about involving parents in school affairs is not. We interpret the three sets of findings in combination

Table 7-5. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of Conformity to His Role Definition With Respect to Support of Innovations

(N = 377)*

Score on Conformity to Principal's Role Definition	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	26%	32%	42%	8.07	5.05	78
Moderate	26	38	36	7.90	4.20	138
Low	42	31	27	5.99	4.80	161

* Data unavailable for five cases.

$t_{(H-L)} = 3.09; p < .001$

Table 7-6. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of Conformity to His Role Definition With Respect to Involvement of Parents in School Affairs

(N = 369)*

Score on Conformity to Principal's Role Definition	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	30%	38%	32%	7.29	5.10	106
Moderate	29	30	42	7.74	4.52	122
Low	40	33	27	6.36	4.46	141

*Data unavailable for thirteen cases.

$t_{(H-L)} = 1.52;\ p > .14.$

as suggesting that the involvement of parents in school activities constitutes a less salient aspect of the principal's role for the administrators in our study than the other two facets of his performance we examined.

Equalitarianism

The hypothesis we now examine is based on the assumption that nearly all principals feel a strong sense of obligation to offer professional leadership to their teachers. This assumption was documented for elementary principals in an earlier publication[7] of the National Principalship Study. We further assume that the more a principal is able to fulfill this perceived obligation, the greater his feelings of worthwhile accomplishment. One of the major problems a principal can expect to encounter in his attempts to influence the quality of his teachers' performance is their professional status. They have completed specialized training at institutions of higher learning and have been judged to possess at least the minimum competence required to carry out their organizational tasks in an essentially autonomous manner. Their employment by an organization indicates its provisional acceptance of their professional qualifications. If granted "tenure," such personnel receive from the organization its full acknowledgment of their capabilities and their right to perform in an autonomous manner. They, therefore, may interpret efforts of administrators to influence their performance as invasions of professional prerogatives. If principals, for example, take the initiative in attempting to help their teachers with problems, their efforts might be construed as betraying a lack of confidence in them. Or, if principals urge the teachers to try a new classroom technique, it may be viewed as encroachment on their rights as professionals. In short, the fact that the teachers have professional status could lead them to resist any efforts on the part of the principals to serve as their leaders.

We reasoned that, other things being equal, a principal with an egalitarian orientation toward his teachers would be more successful in the elicitation of their cooperation and goodwill than one who emphasized distinctions of status and hence would find greater receptivity to his leadership. By treating teachers as members of a "team" and underplaying the hierarchical aspects of the teacher-principal relationship, an egalitarian principal would be more successful than one with non-egalitarian values in influencing staff performance because the former would be much less likely to bruise professional pride than the latter. And, if as we have assumed, the more a principal finds it possible to offer professional leadership to his staff, the greater his feelings of worthwhile accomplishment, it follows that:

Hypothesis 7-3: The more equalitarian a principal is in his orientation to others, the greater his IJS.

To test this hypothesis, we used as a measure of the principals' equalitarianism an index developed from their responses to the short form of The Value Profile, an instrument developed by Bales and Couch.[8] When their responses were factor analyzed, 7 factors emerged and one of them, as anticipated, may be used as an index of equalitarianism. In measuring the 4 items contributing to this factor, the principals were asked to indicate their degree of agreement or disagreement with the following items:

1. There should be equality for everyone - because we are all human beings.
2. Everyone should have an equal chance and an equal say.
3. A group cannot get its job done without voluntary cooperation from everyone.
4. A group of equals will work a lot better than a group with a rigid hierarchy.

A factor score based on these items is the measure used to serve as an index of their equalitarianism.

When the Equalitarianism and IJS scores were cross-tabulated, we found that 38% of the principals who had the highest equalitarianism scores exhibited high IJS as compared to 29% of those who had the lowest equalitarism scores (Table 7-7). Further, the mean IJS scores rose monotonically from a low of 6.30 for those principals lowest on equalitarianism to a high of 7.80 for those highest on this value orientation. This difference of 1.50 units in their IJS scores is significant statistically. We conclude that the hypothesis receives support.

Acceptance of Authority

In the preceding hypothesis we focused on a value orientation that we thought would influence a principal's ability to offer professional leadership to his staff. Now we consider one that we assumed would have a bearing on his relationships with his superiors: acceptance of authority.

Table 7-7. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of His Value Orientation on Equalitarianism

(N = 382)

Score on Equalitarianism	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	26%	36%	38%	7.80	4.14	129
Moderate	31	37	32	7.19	4.54	126
Low	43	28	29	6.30	5.46	127

$t_{(H-L)} = 2.49$; $p < .005$.

We reasoned that principals who had a negative orientation to the acceptance of authority would find it more difficult to draw upon the advice and assistance of higher administrators, when they could be helpful, than those with a more positive orientation to it. Furthermore, if we assume that value orientations influence behavior, then a principal with negative attitudes toward authority figures could be expected to display their feelings in their relationships with their superiors, and they in turn could be expected to react unfavorably to him. Such a principal would likely encounter more resistance and less cooperation from the higher administration when he requested approval of his budget or of his ideas for changes in school programs or practices than a principal with more cordial relationships with higher administrative officials. In short, the more negatively disposed a principal is to the acceptance of authority, the less he would be able to maximize the instrumental value of his superordinates with respect to his own task performance and the more he would encounter resistance to his ideas and plans. Such conditions, we assume, would restrict a principal's opportunity to fulfill his self-actualization needs and hence would tend to lessen his IJS. From these lines of reasoning, it follows that:

Hypothesis 7-4: The greater a principal's acceptance of authority, the higher his IJS.

As an index of the principal's acceptance of authority, we used a second factor, derived from their responses to The Value Profile, which included the following set of items:

1. Obedience and respect for authority are the most important

virtues children should learn.

2. What young needs most is strict discipline, rugged determination, and the will to work and fight for family and country.
3. Patriotism and loyalty are the first and most important requirements of a good citizen.
4. You have to respect authority, and when you stop respecting authority, your situation isn't worth much.
5. There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.
6. Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.
7. The most important qualities of a real man are determination and driving ambition.
8. No sane, normal, decent person could ever think of hurting a close friend or relative.
9. Our modern industrial and scientific developments are signs of a greater degree of success than that attained by any previous society.
10. When we live in the proper way--stay in harmony with the forces of nature, and keep all that we have in good condition--then all will go well in the world.[9]

When we cross-tabulated the principals' scores on this factor, Acceptance of Authority, with their IJS scores, we found support for the hypothesis (Table 7-8). The data reveal that administrators with

Table 7-8. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by Three Levels of His Avlue Orientation on Acceptance of Authority

(N = 382)

Score on Acceptance of Authority	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	26%	31%	43%	8.29	4.25	127
Moderate	36	30	34	7.03	5.04	128
Low	38	39	23	5.98	4.75	127

$t_{(H-L)} = 4.09; p < .001.$

the highest scores on acceptance of authority achieved the highest mean IJS score (8.29) and those with the lowest scores the lowest mean IJS score (5.98). The difference of 2.31 units on the IJS score between principals highest and lowest in their orientation to acceptance of authority is significant statistically. We therefore interpret the findings as supporting the hypothesis.

Time Commitment

Individuals who serve as school principals, just as managerial personnel in other types of organizations, vary as to the amount of time they devote to their jobs. Some of the men administrators indicated that they spent most of their evenings at home working on school affairs while others reported that they gave no attention to educational matters after they left their schools. The responses of the elementary men principals to the question, "How many nights a week, on the average, do you work on school business at home?" were: 4 or more nights a week, 12 per cent; 2 or 3 nights a week, 41 per cent; 1 or less nights a week, 47 per cent. What impact, if any, does this commitment of "off-duty" time to their work have on their job satisfaction?

We have assumed that the more a principal exhibits imaginative and creative approaches in dealing with his organizational problems and the more successful he is in fulfilling his major responsibilities, the greater the likelihood that he will be able to gratify his self actualization needs, and thereby increase his IJS.

A major obstacle to a principal's exhibiting creativity in his work and completing his major tasks is the heavy demands on his time and energy made by his many routine administrative and clerical duties. If he is willing, however, to devote his evenings to his routine duties or to considering how he might resolve school problems, then this device could provide him with the additional time required to fulfill his multiple tasks and the opportunity to explore imaginative and novel approaches to both his short-run and long-range problems. From this line of reasoning it follows that:

Hypothesis 7-5: The more off-duty time a principal devotes to his job, the greater his IJS.

When we tabulated the number of nights the principals reported they work on school business against their Intrinsic Job Satisfaction Score, we found support for the hypothesis. Forty-two per cent of the administrators who worked 4 or more nights a week on school business were in the highest Job Satisfaction category in comparison with only 24 per cent of those who reported spending none of their evenings on school affairs (Table 7-9). Furthermore, the mean job satisfaction score of principals steadily rises with increasing commitment of time to their job. The difference of 3.31 units on the Job Satisfaction index between the principals who spent the most and least time at home on school activities is significant statistically. We conclude, then, that commitment of time to the principalship is positively related to intrinsic job satisfaction.

Table 7-9. Percentage Distribution, Mean, and Standard Deviation of the Principal's IJS Score by the Number of Nights Per Week Devoted to School Business at Home

(N = 380)*

Number of Nights Per Week Devoted to School Business at Home	Principal's IJS Score			Mean IJS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Four or more	22%	36%	42%	8.64	4.19	50
Two or three	34	28	38	7.50	4.74	146
One	32	40	28	6.58	4.78	146
None	52	24	24	5.33	5.02	38

*Data unavailable for two cases.

$t_{(H-L)} = 3.37$; $p < .001$.

Notes and References for Chapter Seven

1. See Appendix B, Table B-14 for the item means, standard deviations, and weights used in computing the score, Self-assessment of Ability to Offer Educational Leadership to the Staff.

2. See Appendix B, Table B-15 for the item means, standard deviations, and weights used in computing the score, Self-assessment of Ability in Dealing with Routine Managerial Tasks.

3. See Appendix B, Table B-16 for the item means, standard deviations, and weights used in computing the score, Self-assessment of Ability in Human Relations Skills.

4. These eight items were selected on the basis of a factor analysis of 22 items dealing with various ways principals can exercise control over their teachers' performance that were included in a Role Behavior Instrument covering several dimensions of the principals' behavior. The factor analysis procedures used are described in detail in Neal Gross and Anne E. Trask, _Men and Women as Elementary School Principals_, Final Report No. 2, Cooperative Research Project No. 853, June 1964, Chapter 8.

5. These six items were selected on the basis of a factor analysis of a series of items dealing with various ways principals can support innovations. See Robert Dreeben and Neal Gross, _The Role Behavior of School Principals_, Final Report No. 3, August 1965, Chapter 3 for details of the findings of the factor analysis.

6. The six items involved in developing this index of conformity were selected on the basis of a factor analysis dealing with various ways principals can involve parents in school affairs. See Dreeben and Gross,

op. cit., Chapter 3.

7. Neal Gross and Robert E. Herriott, *Staff Leadership in the Public Schools: A Sociological Inquiry* (New York: John Wiley and Sons, 1965), Chapter 9.

8. For a description of this instrument, see Robert F. Bales and Arthur S. Couch, *The Value Profile: A Factor Analytic Study of Value Sentiments*, 1959, an unpublished report. See Appendix B-17 for the item means, standard deviations, and weights used in computing the score, Equalitarianism.

9. See Appendix B-18 for the item means, standard deviations, and weights used in computing the score, Acceptance of Authority.

Chapter 8: Career Satisfaction: Theoretical Formulation, the Hypotheses, and Methodological Issues

In previous chapters our interest centered on factors associated with the intrinsic job satisfaction of principals. In this and the two following chapters we shall be concerned with the second major problem of the study: to account for the variation in the degree to which principals derive gratification from their choice of educational administration as a career. We shall use the term, career satisfaction (CS), to refer to this phenomenon. All the hypotheses to be tested about possible correlates of career satisfaction are based on one or another of two types of reasoning. In this chapter we present both of these theoretical formulations and the hypotheses based on them that will be tested in later chapters. In addition, we shall consider methodological issues of special relevance to the career satisfaction study. We shall present the way we measured career satisfaction and describe procedures of special pertinence to the analysis of the data of the CS inquiry.

The Theoretical Framework

What circumstances account for the variation among men who serve as school principals in their satisfaction with their selection of educational administration as a career? Of the many theoretical formulations we explored as possible sources of hypotheses to account for the variance in their CS, two appeared to be especially heuristic. We shall refer to the first explanation as the "extrinsic rewards gratification" theory and the second as the "intrinsic rewards gratification" theory.

Gratification with Extrinsic Rewards

This theory is based on the assumption that the explanation of the variation in the career satisfaction of men who serve in the same managerial capacity, for example, school principals, may be found in their differential gratification with its extrinsic rewards. That is, it is assumed that although individuals in the same occupational category in a career line with obtain roughly equivalent incomes and social status, they will vary in the degree to which they are satisfied with its extrinsic rewards. And it is assumed that their career satisfaction varies directly with the degree of gratification they derive from the extrinsic rewards associated with the highest position they have achieved in their career line. If this assumption is tenable, then it would follow that among men in the same occupational position, circumstances that would enhance the gratification they derive from its extrinsic rewards would tend to increase their career satisfaction, and those conditions that would lower the gratification they would derive from its extrinsic rewards would serve to decrease their career satisfaction.

This line of reasoning leads to the question, "What accounts for the variation in the degree of gratification men who serve in the same occupational capacity derive from the income and social status "returns" of their positions?" An answer is suggested by reference group theory. A basic premise of this theory is that different categories of individuals use different standards for comparison in assessing the same phenomenon, and therefore they vary in their feelings of relative deprivation or relative gratification about it. Stouffer used the concept of relative deprivation as an explanation of why men in the army who had achieved the same amount of upward mobility varied in their views about their promotions.

> For example, a grade school man who became a corporal after a year of service would have had a more rapid rate of promotion compared with most of his friends at the same educational level than would a college man who rose to this same grade in a year. Hence we would expect, at a given rank and a given longevity, that the better educated would be more likely than others to complain of the slowness of promotion.[1]

Reference group theory thus led us to assume that the variation in the relative gratification principals derive from the extrinsic rewards of their work may be accounted for by the different comparative standards or frames of reference they use in assessing them. We shall test six hypotheses based on this theoretical assumption. They will specify characteristics of principals that we reasoned would lead them to use different standards or reference groups for comparison in assessing the extrinsic rewards of their jobs and these different bases of comparison, we assumed, would result in their feelings of relative deprivation or gratification about them. The six hypotheses, based on assumptions about the impact of gratification with the extrinsic rewards of an occupation on career satisfaction and reference group theory, are presented below. For each of them, we also indicate why we reasoned that the independent variable would be related to the intervening variables.

Hypothesis 9-1: The higher the occupational aspirations of male principals, the lower their career satisfaction

The hypothesis is based on the assumptions that principals use the extrinsic rewards of the top position to which they aspire as a frame of reference in assessing the extrinsic rewards of their own position; and when they compare the extrinsic rewards of their current job with that of the top position to which they aspire, the greater they find the discrepancy between the income and social status returns of their present position and the one they aspire to, the less gratification they will derive from the extrinsic rewards of their present position.

Hypothesis 9-2: Men principals with a Bachelor's degree will have the highest career satisfaction; those with a Master's degree will have somewhat lower career satisfaction; and those with a Doctor's degree will have the lowest career satisfaction.

The hypothesis is based on the assumptions that principals use individuals in the field of education who have obtained degrees equivalent to their own as comparative reference groups; and in comparing the extrinsic rewards of their job with those of the occupational positions achieved by individuals with the same academic degrees, principals with Bachelor's degrees will derive the greatest gratification from the extrinsic rewards of their work, those with Master's degree somewhat less, and principals with a Doctor's degree will derive the least.

Hypothesis 9-3: Among men principals, the earlier their age when they first become a school principal, the less their career satisfaction

The hypothesis is based on the assumptions that men use as a point of reference in assessing the extrinsic rewards of their current position in a career line their age at the time they achieved it; and the earlier the age at which a principal first entered the principalship, the less gratification he will derive from the extrinsic rewards of his current position.

Hypothesis 9-4: Among men principals, Negroes will express higher satisfaction with their careers than white administrators

The hypothesis is based on the assumptions that Negro and white principals use members of their own race in the labor force as reference groups; in comparing the extrinsic rewards of the principalship with those of the occupational positions of members of their own race in the labor force, Negro principals will derive greater gratification than white principals from the extrinsic rewards of their present position.

Hypothesis 9-5: Among men principals, those who identify with the Jewish faith will express lower satisfaction with their careers than administrators with other religious identities.

The hypothesis is based on the assumptions that principals with different religious identities use individuals with their same religious identities as comparative reference groups; in comparing the extrinsic rewards of the principalship with those of the occupations of members of their religious group, Jewish principals will derive less gratification with the extrinsic rewards of their work than non-Jewish principals.

Hypothesis 9-6: Among men principals, the higher the socio-economic status of the father, the lower the career satisfaction of the principal.

The hypothesis is based on the assumptions that men use the socio-economic status of their fathers as a frame of reference in assessing their own occupational status; and in comparing the extrinsic rewards of the principalship with the income and social status achieved by their fathers, the higher the socio-economic status of the principals' father the less gratification he will derive from the extrinsic rewards of his current job.

Gratification with Intrinsic Rewards

Now we turn to the second theoretical formulation we used to account for variation in the career satisfaction of men principals. It is based on the premise that the explanation of variation in the career satisfaction of men who serve in the same managerial capacity may be found in the differential intrinsic rewards they derive from their work. That is, it is assumed that they will vary in the intrinsic job satisfaction they obtain from performing the tasks that constitute the duties of the highest position they have achieved in their career line; and it is further assumed that career satisfaction varies directly with their intrinsic job satisfaction. If these assumptions are tenable, then it would follow that among a group of men school principals, those circumstances that would serve to enhance their intrinsic job satisfaction would increase their career satisfaction; and those conditions that would tend to lower their intrinsic job satisfaction would decrease their career satisfaction.

In Chapters 5, 6, and 7 we reported a number of findings about circumstances in the principals' organizational environment and his own personal characteristics that were associated with their intrinsic job satisfaction. If the line of reasoning that posits that career satisfaction is a function of intrinsic job satisfaction (IJS) is correct then those variables that we have found to be related to IJS should also be related to career satisfaction. We shall test 17 hypotheses based on this line of reasoning. Each of them uses as an independent variable a characteristic of the principal's work environment or a personal variable that the empirical findings presented in earlier chapters showed was related to IJS.

Measurement of Career Satisfaction

Our measure of the Career Satisfaction (CS) of principals refers to the degree of gratification they derive from having chosen educational administration as a career. As an operational definition of this concept we desired a measure that would reflect three aspects of their gratification with their career decision. The first was their feelings about their choice of an educational career rather than some other profession or occupation they might have originally contemplated. We reasoned that the extent to which individuals in the same position along a career line express more or less gratification with their occupational career choice when they compared it to others they had initially considered would constitute one general indicator of their relative satisfaction with their career decision. The second aspect had reference to their feelings about the upward mobility they had experienced in their educational careers.

We reasoned that the degree to which principals expressed more or less gratification with their occupational progress would also reflect their relative satisfaction with having selected educational administration as a career. The third aspect dealt with the degree of gratification they derived from having selected a type of work which they felt allowed them to maximize their particular capabilities.

There were three questions in the satisfaction with Conditions of Work and Career Instrument (Appendix A) that dealt specifically with their feelings about these aspects of their careers. These were: How satisfied ("very satisfied," "moderately satisfied," "slightly satisfied," "slightly dissatisfied," "moderately dissatisfied," "very dissatisfied") do you feel about:

1. Your decision to become an educator rather than something else which you may have originally considered.

2. The amount of progress which you have made in your professional career.

3. The opportunity which the principalship provides for making the best use of your particular talents.

The distribution of the principals' replies to each of these questions is presented in Table 8-1. Their responses to the three questions were then given weights from six ("very satisfied") to one ("very dissatisfied") and intercorrelated and the findings revealed, as anticipated, that there were positive and statistically significant relationships among them (Table 8-2). We then subjected the matrix of correlation coefficients presented in Table 8-2 to a principal components factor analysis.[2] To

Table 8-1. Percentage Distribution, Mean, and Standard Deviation of the Responses of 382 Men Principals to Three Questions about Satisfaction with Different Aspects of their Careers

The Question	The Response Choices	
How satisfied do you feel about the following items?	A = Very satisfied B = Moderately satisfied C = Slightly satisfied	D = Slightly dissatisfied E = Moderately dissatisfied F = Very dissatisfied

	Per Cent of Principals Responding								
Item*	A (6)	B (5)	C (4)	D (3)	E (2)	F (1)	Mean	Standard Deviation	N
4. The amount of progress which I have made in my professional career.	32	49	12	3	3	1	5.02	0.98	382
12. The opportunity which the principalship provides for making the best use of my particular talents.	40	44	12	2	2	-	5.17	0.88	382
17. My decision to become an educator rather than something else which I may have originally considered.	56	35	6	2	1	-	5.43	0.76	382

*Items are numbered according to their position in the Satisfaction with Conditions of Work and Career Instrument (see Appendix A-2).

Table 8-2. Intercorrelations Among Principals' Responses to Three Questions[a] about Satisfaction with Different Aspects of Their Careers

(N = 382)

	Question 4	Question 12	Question 17
Question 4	--	.37*	.30*
Question 12	.37*	--	.38*
Question 17	.30*	.38*	--

[a] For wording of questions and response categories, see Table 8-1.

*Significant at below .01 level.

obtain a summary measure of Career Satisfaction (CS) for each principal, we used the loadings of the three questions as weights in computing the factor scores.

In using the CS scores for men principals in our analyses, we view it as a continuous variable with a mean of 1.94, a standard deviation of 1.01, and a range of 5.48. To describe the findings presented in Chapters 9 and 10, we shall separate the 382 men principals into three groups ("low," "moderate," and "high") according to their CS score, making them as nearly equivalent in size as possible. To offer some insight into what is meant when we classify principals as relatively "high," "moderate," or "low" in CS, the responses of the 382 principals to the three questions were tabulated for each of the three levels of CS and they are presented in Table 8-3.

As was the case with our measure of IJS, our classification of principals into "high," "moderate," and "low" groups according to their CS scores is indicative of relative, rather than absolute differences, in their Career Satisfaction. This point deserves special note in view of the large proportion of principals who responded "very satisfied" or "moderately satisfied" in replying to the three questions used in developing the CS measure (Table 8-1).

The replies of the principals to four questions in a "Commitment to Educational Administration" Instrument provided an opportunity to obtain evidence bearing on the validity of our index of CS. During their interviews, the principals were asked to indicate whether they would be willing to accept ["definitely would," "probably would," "probably would not,"

Table 8-3. Percentage Distribution and Mean of the Responses of 382 Male School Principals to the Three Items in the CS Factor Score, by Three Classifications of Their CS Level

The Question	The Response Choices
How satisfied do you feel about the following items?	A = Very satisfied B = Moderately satisfied C = Slightly satisfied D = Slightly dissatisfied E = Moderately dissatisfied F = Very dissatisfied

Item*	Principal's CS Level	Per Cent of Principals Responding						Mean	N
		A (6)	B (5)	C (4)	D (3)	E (2)	F (1)		
12. The opportunity which the principalship provides for making the best use of my particular talents.	High	100	-	-	-	-	-	6.00	111
	Moderate	26	61	13	-	-	-	5.13	126
	Low	5	63	21	6	4	1	4.56	145
17. My decision to become an educator rather than something else which I may have originally considered.	High	100	-	-	-	-	-	6.00	111
	Moderate	72	27	1	-	-	-	5.71	126
	Low	8	68	17	6	1	-	4.75	145
4. The amount of progress which I have made in my professional career.	High	64	36	-	-	-	-	5.64	111
	Moderate	38	51	10	1	-	-	5.26	126
	Low	3	57	23	7	9	1	4.34	145

*Items are numbered according to their position in the Satisfaction with Conditions of Work and Career Instrument (see Appendix A-2) and are presented in the order to which their factor loadings contributed to the CS factor score (see Appendix Table B-19 for the factor loadings of the three items).

"definitely would not"] the four following job offers, each of which would result in a substantial increase in salary but would also require them to leave the field of educational administration:

1. An administrative position with a reputable textbook company with a salary $4,000 greater than their present salary.
2. An administrative position in the personnel department of a large industrial firm with a salary $4,000 greater than their present salary.
3. A position as a faculty member of a school of education with a salary $2,000 greater than their present salary.
4. A position as a public school teacher with a salary $2,000 greater than their present salary.

We reasoned that if the CS index in fact measured what it was designed to measure then those principals who were positively predisposed to accept each of the job offers should have a lower mean CS score than the one obtained by those who had a negative orientation to leaving the field of educational administration for any of these higher paying jobs. To examine the relationship between the principals' responses to each of these questions and their CS scores, we first categorized them into two groups: those who responded that they definitely or probably would accept the job offer and those who replied that they definitely or probably would not accept it; and then we calculated the mean CS scores for the two categories. The findings are presented in Table 8-4. They reveal that for each of the four job offers, the principals who stated that they definitely or probably would not accept it had higher mean CS scores

Table 8-4. The Mean and Standard Deviation of the Principal's Career Satisfaction (CS) Score by His Willingness to Accept Four Job Offers Outside the Field of Education

Job Offer and Willingness to Accept:	Mean CS Score	Standard Deviation	Number of Cases	t Value
1. Administrative position with a textbook company -- \$4,000 increase in salary.				
Definitely or probably accept	1.68	1.04	128	3.56; $p < .001$
Definitely or probably not accept	2.07	0.98	252	
2. Administrative position in personnel department of large industrial firm -- \$4,000 increase in salary.				
Definitely or probably accept	1.55	1.08	145	6.10; $p < .001$
Definitely or probably not accept	2.18	2.18	232	
3. Position as faculty member of school of education -- \$2,000 increase in salary.				
Definitely or probably accept	1.78	1.06	160	2.60; $p < .005$
Definitely or probably not accept	2.05	0.96	222	

Table 8-4 (continued)

Job Offer and Willingness to Accept:	Mean CS Score	Standard Deviation	Number of Cases	t Value
4. Position as a public school teacher -- $2,000 increase in salary.				
Definitely or probably accept	1.57	1.24	122	5.00; $p < .001$
Definitely or probably not accept	2.11	0.83	260	

than those who said that they definitely or probably would; and in each instance the difference is significant statistically. We interpret these findings as offering some support for the validity of the CS measure.

Statistical Models and Statistical Inference

Our strategy of statistical analysis in testing hypotheses about possible determinants of the Career Satisfaction of principals will be the same as the one we reported in Chapter 3 with respect to our investigation of correlates of IJS. For the purposes of drawing a conclusion about an hypothesis or basic assumption, we shall again generally require that the relationship be significant at below the .05 level, using a one-tailed test.

In the IJS study, the hypotheses we tested were based on assumptions about intervening variables (t's) that might account for the relationship between an independent variable (x) and the dependent variable (y), intrinsic job satisfaction. Data were unavailable, however, to develop measures of the "t" variables and therefore we were precluded from empirically examining whether they, in fact, might possibly "interpret" or explain the relationship between x and y. For the Career Satisfaction (CS) inquiry, we did have data to develop indices of the "t" or intervening variables, and therefore will investigate whether the evidence provides any support for the reasoning underlying the hypotheses. The procedures we shall use in this respect deserve special comment.

For each hypothesis to be tested, we assume that third variables may intervene as links in a causal chain between the independent variable (x) and the dependent one (y), Career Satisfaction. If the reasoning underlying the hypothesis is tenable, then three necessary conditions must exist: first, the "t" variable(s) assumed to intervene between the x and y variables should be related to x; second, the "t" variable(s) should be related to y; and third, if these specifications are met, then when the effects of the "t" variable(s) are removed, the magnitude of the relationship between x and y should decrease.[3]

The procedure we shall use to control or hold constant the effect of "t" variables when we re-examine the original relationship between independent variables and CS deserves special comment. Although partial correlation and subclassification are the most commonly used control techniques in survey research, the former can be used only with continuous variable data, while the latter lacks the clarity of control through standardization, a technique specifically designed for the "interpretative" type of t-variable analysis that we shall perform in the CS inquiry.[4]

Since the technique of standardization may be unfamiliar to some readers, we present a short description of its rationale and procedures. Essentially, the procedure involves subclassifying the data according to the categories of the "t" variable and adjusting the cell frequencies in the sub-cross-tabulations of the independent and dependent variables in such a way that the marginals of the independent variable in each subtable are equal. For example, suppose that a simple cross-tabulation revealed significant differences between the wages of male and female members in a particular industry. If the analyst reasoned that a large part of the wage differential could be explained by the higher educational attainments of males, he could test this assumption with the standardization procedure. To do so, he would first subclassify his data according to educational attainment, for example, college versus non-college graduates. He then would cross-tabulate the sex and wage data at each educational level, adjusting the cell frequencies of the two sub-tables so that the marginals of the independent variable (sex) were equal in each of them. Finally, he would combine the adjusted sub-tables into a single standardized table by weighting each sub-table according to its original relative contribution to the total sample size and then sum the weighted, adjusted cell frequencies across sub-tables. Support for the assumption that differential educational attainment might "interpret" or explain the differential wages of male and female employees in the industry would be obtained if the percentage difference between the two sexes at different wage levels were smaller in the standardized table than in the original table.[5]

One final methodological point deserves consideration. As in the case of the IJS study, we had to decide whether to undertake separate analyses in the career satisfaction inquiry for the elementary, junior high, and senior high principals. The decision we reached was essentially based on the results that emerged when we cross-tabulated the responses of the principals to each of the three satisfaction items that were to be included in our summary measure of CS by their school level. The findings are presented in Table 8-5. They reveal that there are no statistically significant differences among the elementary, junior high,

Table 8-5. Percentage Distribution, Mean, and Standard Deviation of the Responses of 382 Men Principals to Three Questions about Satisfaction with Different Aspects of Their Careers by School Level

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The Question

How satisfied do you feel about the following items?

The Response Categories

A = Very satisfied
B = Moderately satisfied
C = Slightly satisfied
D = Slightly dissatisfied
E = Moderately dissatisfied
F = Very dissatisfied

Item*	School Level	Per Cent of Principals Responding A (6)	B (5)	C (4)	D (3)	E (2)	F (1)	Mean	Standard Deviation	N	
4. The amount of progress which I have made in my professional career.	E.	25	52	16	2	5	-	4.89	0.97	98	x^2 = 5.87,
	J.H.	33	47	12	4	2	1	5.03	0.98	129	6 d.f., p .50[a]
	S.H.	37	48	9	3	3	1	5.10	0.97	155	
12. The opportunity which the principalship provides for making the best use of my particular talents.	E.	33	47	16	2	2	-	5.06	0.87	98	x^2 = 4.46,
	J.H.	44	43	9	2	2	-	5.27	0.82	129	4 d.f., p .34[b]
	S.H.	40	43	12	3	1	1	5.15	0.92	155	
17. My decision to become an educator rather than something else which I may have originally considered.	E.	49	39	5	5	2	-	5.28	0.93	98	x^2 = 4.36,
	J.H.	60	34	5	1	-	-	5.53	0.64	129	4 d.f., p .35[b]
	S.H.	57	32	8	2	-	-	5.45	0.73	155	

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*Items are numbered according to their position in the Satisfaction with Conditions of Work and Career Instrument (see Appendix A-2).

[a] Columns 1, 2, and 3 were combined in computing the chi-square in order to obtain an expected value of at least 5 in every cell in the contingency table.

[b] Columns 1, 2, 3, and 4 were combined in computing the chi-square in order to obtain an expected value of at least 5 in every cell in the contingency table.

and senior high principals in their responses to any of the three items. As a consequence of these findings, it was decided that it would not be necessary to carry out separate analyses of the determinants of CS for each school level.

Notes and References for Chapter Eight

1. Samuel A. Stouffer, et al., The American Soldier: Adjustment During Army Life, Volume 1 (Princeton: Princeton University Press, 1949), p. 250.

2. For a treatment of factor analysis, see Harry H. Harmon, Modern Factor Analysis (Chicago: University of Chicago Press, 1960).

3. For a general discussion of "third variable" analysis, see Herbert Hyman, Survey Design and Analysis (Glencoe: The Free Press, 1955), Chapters 6 and 7; also see Herbert M. Blalock, Social Statistics (New York: McGraw Hill Book Co., 1960), Chapter 19.

4. For a consideration of standardization and subclassification as procedures to control "t" variables, see John H. Mueller and Karl F. Schuessler, Statistical Reasoning in Sociology (Boston: Houghton Mifflin Co., 1961), pp. 189-202. Also see Morris Rosenberg, "Test Factor Standardization as a Metho of Interpretation," Social Forces, 41 (1962), pp. 53-61.

5. Mueller and Schuessler, op. cit.

Chapter 9: Determinants of Career Satisfaction: Hypotheses Based on Relative Gratification with Extrinsic Rewards

In the first part of Chapter 8 we presented six hypotheses about factors related to the career satisfaction of principals, each of which was based on an extrinsic rewards gratification explanation of its determinants. We also specified our assumptions about the relationship between the independent and intervening variables involved in each hypothesis. In this chapter, we shall examine whether these hypotheses receive any empirical confirmation. For those that do, we shall also determine whether the reasoning on which they were based is supported by the available evidence.

Since all of the hypotheses are based on the premises that a principal's relative gratifications with the income and the social status rewards of his job are positively related to his career satisfaction, we shall first present our findings about these assumptions.

Gratification with the Income and Social Status Rewards of the Principalship and Career Satisfaction

To test the assumption that the principal's gratification with the social status of their occupation is positively related to their career satisfaction, we used as an index of their gratification with the social status of the principalship a summary measure based on their responses to the three following questions: How satisfied are you ("very satisfied," "moderately satisfied," "slightly satisfied," "slightly dissatisfied," "moderately dissatisfied," "very dissatisfied") with:

1. The amount of recognition which principals are given by society for their efforts and contributions.

2. The amount of recognition which principals are given by members of other professions.
3. The amount of recognition which non-educators give to principals as compared to that given to other professionals.

Their replies were combined to form a 3-item Guttman-type scale having a coefficient of reproducibility of .990.[1] When this index of gratification with the social status of the principalship is cross-tabulated with the principal's career satisfaction scores, strong support is found for the assumption: the mean scores on career satisfaction rise monotonically from a low of 1.41 for those principals with the lowest scores on gratification with the social status rewards of their position to a high of 2.82 for those with the highest scores on this index of its extrinsic rewards (Table 9-1). The positive relationship between these two variables is statistically significant.

Similar findings emerged when we related an index of the principals' gratification with the income rewards of their position to their career satisfaction. To test this assumption we used as a summary measure of gratification with income rewards of the principalship their responses to the two following questions: How satisfied are you with:

1. The top salary nowadays available for principals.
2. My chances for receiving salary increases as a principal.

Their replies were combined to form a 2-item Guttman-type scale having a coefficient of reproducibility of .987.[2]

The relationship between this index of gratification with the income rewards of the principalship and CS is also positive and significant

Table 9-1. Percentage Distribution, Mean, and Standard Deviation of the Principal's Career Satisfaction (CS) Score by Three Levels of His Score on Gratification with the Social Status of the Principalship

(N = 382)

Score on Gratification with the Social Status of the Principalship	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Highest	5%	22%	73%	2.82	0.55	65
Moderately High	30	45	25	2.05	0.83	124
Moderately Low	51	32	17	1.70	0.95	111
Lowest	59	26	15	1.41	1.14	82

$t_{(H-L)} = 9.12$; $p < .001$

statistically (Table 9-2). We therefore may proceed with the assurance that two of the basic assumptions involved in the formulation of the hypotheses to be examined in this chapter receive empirical support; gratifications with income and social status rewards of the principalship are positively related to career satisfaction.

Occupational Aspirations

Hypothesis 9-1: The higher the occupational aspirations of male principals, the lower their career satisfaction

To test this hypothesis we used as an index of the principals' occupational aspirations their responses to a Level of Aspiration Instrument. Of each item, they were asked to indicate which of the following five categories of response best reflected their feelings:

I would not want to . . .
I am not especially anxious to . . .
I have some desire to . . .
I am extremely anxious to . . .

Their responses were assigned weights from five to one, intercorrelated, and then subjected to a factor analysis. Four items had high loadings on a factor reflecting aspiration for upward occupational mobility:

1. Obtain a higher administrative position in some other school system.
2. Become an assistant or deputy superintendent of schools in a large city system.

Table 9-2. Percentage Distribution, Mean, and Standard Deviation of the Principal's Career Satisfaction (CS) Score by Three Levels of His Score on Gratification with the Income Rewards of the Principalship

(N = 382)

Score on Gratification with the Income Rewards of the Principalship	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	20%	39%	41%	2.39	0.67	163
Moderate	43	33	24	1.78	1.08	94
Low	58	25	17	1.48	1.10	125

$t_{(H-L)} = 8.68$; $p < .001$

3. Become the school superintendent of a small school system.
4. Become the school superintendent of a large city system.

When the principals' factor scores on this index of level of occupational aspiration were cross-tabulated with their career satisfaction scores, support is found for the hypothesis (Table 9-3): 20 per cent of the administrators who scored highest, as compared to 38 per cent who scored lowest, on level of aspiration had high career satisfaction scores. The difference in the mean CS scores between the principals who were highest in their level of aspiration (1.71) and those who were lowest (2.09) was 0.38 and it was significant statistically. We interpret the data as supporting a negative relationship between level of occupational aspiration and career satisfaction.

Now we shall examine whether the reasoning underlying the hypothesis received any empirical support. We assumed that the intervening variables of gratification with the income rewards and the social status of the principalship link level of aspiration to career satisfaction. Briefly stated, the reasoning was as follows: If administrators whose occupational aspirations are relatively low derive greater gratification from the economic and social status rewards of the principalship than those with higher aspirations because of the different comparative standards they apply; and if gratification with both types of rewards are positively related to career satisfaction, then principals with relatively low aspirations will express greater career satisfaction than those who have relatively high career aspirations

In testing this reasoning, we first need to inquire if the intervening

Table 9-3. Percentage Distribution, Mean, and Standard Deviation of the Principal's Career Satisfaction (CS) Score by Three Levels of His Score on Occupational Aspirations

(N = 382)

Level of Occupational Aspiration	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	47%	33%	20%	1.71	1.05	108
Moderate	33	39	28	1.98	0.99	147
Low	36	26	38	2.09	0.98	127

$t_{(H-L)} = 2.90;\ p < .002$

variables are in fact related to both the independent variable (level of aspiration) and the dependent one (career satisfaction). If these assumed relationships do not exist, then, of course, the basic assumptions on which the hypothesis are based are in error. If the evidence provides support for them, we can proceed to the next step.

We have already shown that the intervening variables, gratification with economic rewards and gratification with social status, are related to the dependent variable, career satisfaction. The findings with respect to the relationship of the independent variable, level of occupational aspiration, to the two intervening variables are presented in Tables 9-4 and 9-5. They reveal support for our assumptions that principals with low aspirations are on the average more satisfied with the economic rewards and the social status of the principalships than those with higher aspirations. Table 9-4 shows that a significantly larger proportion of the administrators who are in the lowest category on our measure of level of aspiration express a high degree of gratification with the economic rewards of the principalship than do those who are in the highest category on this measure (52 per cent versus 31 per cent). Table 9-5 reveals similar findings about the relationship of level of aspiration to gratification with the social status of the principalship: over twice the proportion of principals with the lowest level of aspiration than those with the highest level expressed high gratification with the social status of the principalship (25 per cent versus 10 per cent).[3]

We now know that two of the three conditions required for the intervening variable to serve in part as a possible explanation of the

Table 9-4. Principal's Level of Aspiration Score and Score on Gratification with the Income Rewards of the Principalship

(N = 382)

Level of Occupational Aspirations	Gratifications with Income Rewards of the Principalship			Total Percent	Number of Cases
	Low	Moderate	High		
High	44%	25%	31%	100%	108
Moderate	31	25	44	100	147
Low	24	24	52	100	127

$\chi^2 = 13.70$; 4 d.f.; $p < .01$; one-tailed test

Table 9-5. Principal's Level of Aspiration Score and Score on Gratification with the Social Status of the Principalship

(N = 382)

Level of Occupational Aspirations	Gratification with Social Status of the Principalship				Total Percent	Number of Cases
	Lowest	Moderately Low	Moderately High	Highest		
High	27%	31%	32%	10%	100%	108
Moderate	18	30	37	15	100	147
Low	21	27	27	25	100	127

$X^2 = 13.49$; 6 d.f.; $p < .05$; one-tailed test relationship between the independent and dependent variables are fulfilled: the independent variable (x) is related to the intervening variable (t), and t is related to the dependent variable (y). Now we shall determine if the third condition is fulfilled: that the original relationship between x and y declines when we control for y.

This condition will be met, if, when we control for the intervening variable through standardization the differences in the career satisfaction between principals who are low and high in level of aspiration in the original relationship are reduced. Table 9-6A shows the original relationship and Table 9-6B the standardized relationship. When we compare these tables, we find that the differences do in fact decline. If principals with high and low level of occupational aspirations did not differ in gratification with the income returns of the principalship, then the difference of 18 per cent in high career satisfaction between these groups would be reduced to 15 per cent and the difference of 11 per cent in low career satisfaction between them would decline to 3 per cent. The evidence also indicates that gratification with the social status of the principalship also meets the condition required for it to serve as an explanatory variable. A comparison of Table 9-6A and 9-6C shows that the difference of 18 per cent in high career satisfaction between principals who are high and low in their level of aspiration declines to 10 per cent and that the difference of 11 per cent in low career satisfaction between these two groups drops to 4 per cent. We conclude, therefore, that the data support the contention that both relative gratification with the income returns and social status of the

Table 9-6. Level of Occupational Aspiration by Career Satisfaction: (A) Original Relationship; (B) Relationship Standardized on Gratification with the Income Rewards of the Principalship; (C) Relationship Standardized on Gratification with the Social Status of the Principalship

A. Original Relationship

Occupational Aspiration	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
High	47%	33%	20%	100%	108
Moderate	33	39	28	100	147
Low	36	26	38	100	127

B. Standardized Relationship
(Gratification with Income Rewards of the Principalship)

Occupational Aspiration	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
High	43%	36%	21	100%	108
Moderate	34	39	28	100	147
Low	40	24	36	100	127

C. Standardized Relationship
(Gratification with Social Status of the Principalship)

Occupational Aspiration	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
High	42%	33%	25%	100%	108
Moderate	33	38	29	100	147
Low	38	27	35	100	127

principalship *may* explain *in part* the relationship between level of aspiration and career satisfaction.

Highest Academic Degree

Hypothesis 9-2: *Men principals with only a Bachelor's degree will have the highest career satisfaction; those with a Master's degree will have somewhat lower career satisfaction; and those with a Doctor's degree will have the lowest career satisfaction.*

When the highest academic degree received by principals is cross-tabulated with their CS scores, the findings do not support the hypothesis (Table 9-7): the principals with a Master's degree obtained the highest mean CS score (1.99), those with a Doctorate the next highest (1.78), and those with a Bachelor's degree the lowest (1.76). To determine if there was any relationship between the highest academic degree achieved by the principals and their CS scores, we used the F test to ascertain if the differences among the three mean scores were statistically significant. The findings revealed that they were not, and therefore, we conclude that the independent variable is not related to CS.

Age at which Administrators First Became Principals

Hypothesis 9-3: *Among men principals, the earlier the age at which they first became a school principal,*

Table 9-7. Percentage Distribution, Mean, and Standard Deviation of the Principal's Career Satisfaction (CS) Score by Highest Academic Degree Obtained

(N = 382)

Highest Academic Degree	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Bachelor's	32%	32%	36%	1.76	1.45	19
Master's	38	33	29	1.99	0.93	320
Doctorate	40	31	29	1.78	1.16	43

$t_{(D-B)} = -.06$; p .50

F = 1.20; $p > .30$

the less their career satisfaction.

The findings provide support for the hypothesis (Table 9-8): the proportion of principals with low scores on our index of career satisfaction (column 2, Table 9-8) is greatest for principals who achieved their first principalship when they were under 35 years of age and lowest for those who achieved it when they were 46 years of age or older. The difference between the mean career satisfaction scores of principals who achieved their position when they were under 35 or over 45 years of age is significant statistically.

When we examine the findings bearing on the premises underlying the hypothesis, that the independent variable is positively associated to the two intervening variables, they reveal, however, that neither received empirical support. Table 9-9 does not indicate a positive trend between age at which the administrators obtained their first principalship and gratification with the income rewards of their job; and Table 9-10 shows that although the trend of the association between age at which they secured their first principalship and gratification with the social status of their job is positive, it is not significant statistically. We conclude, therefore, that the assumptions underlying the hypothesis are in error and, therefore, that relative gratification with the income rewards and social status of the principalship cannot account for the negative relationship between age at which the administrators first became principals and their career satisfaction.

Table 9-8. Percentage Distribution, Mean, and Standard Deviation of the Principal's Career Satisfaction (CS) Score by Age at Time of First Principalship

(N = 382)

Age at Time of First Principalship	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
46 or older	32%	36%	32%	2.10	0.94	76
41 - 45	37	28	35	1.98	1.01	110
35 - 40	34	42	24	2.00	0.85	94
34 or under	46	28	26	1.76	1.10	102

$t_{(H-L)} = 2.15; p < .02$

Table 9-9. Principal's Age at Time of First Principalship and Score on Gratification with the Income Rewards of the Principalship

(N = 382)

Age at Time of First Principalship	Gratifications with Income Rewards of the Principalship			Total Percent	Number of Cases
	Low	Moderate	High		
46 or older	37%	22%	41%	100%	76
41 - 46	27	22	51	100	110
35 - 40	36	28	36	100	94
34 or under	32	27	41	100	102

x^2 = 5.20; 6 d.f.; p > .50; one-tailed test

Table 9-10. Principal's Age at Time of First Principalship and Score on Gratification with the Social Status of the Principalship

(N = 382)

Age at Time of First Principalship	Gratification with Social Status of the Principalship: Lowest	Moderately Low	Moderately High	Highest	Total Percent	Number of Cases
46 or older	17%	29%	33%	21%	100%	76
41 - 46	21	32	28	19	100	110
35 - 40	25	23	36	16	100	94
34 or under	23	32	33	12	100	102

$\chi^2 = 6.80$; 9 d.f.; $p > .50$; one-tailed test

Race

Hypothesis 9-4: Among men principals, Negroes will express higher satisfaction with their careers than white administrators.

Table 9-11 indicates that although a larger percentage of the Negro than white principals in the sample are in the high category on our index of career satisfaction (38 per cent versus 28 per cent), the difference in the mean Career Satisfaction Scores of the two groups is not significant statistically. We conclude, therefore, that the findings do not support the hypothesis.

Religion

Hypothesis 9-5: Among men principals, those who identify with the Jewish faith will express less career satisfaction than administrators with other religious identities.

The findings provide no support for the hypothesis (Table 9-12): the per cent of Jewish principals with low scores on career satisfaction is almost identical to that of principals who were non-Jewish (39 per cent versus 38 per cent), and the small difference in their mean CS scores is not statistically significant.

In a further exploration of whether religion was associated with the career satisfaction of the principals, we categorized them into three religious groups: Protestant, Catholic and Jewish. The findings, reported in Table 9-13, again show that religious affiliation is not related to CS.

Table 9-11. Percentage Distribution, Mean, and Standard Deviation of the Principal's Career Satisfaction (CS) Score by Race

(N = 382)

Race	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Negro	31%	31%	38%	2.05	1.18	33
White	39	33	28	1.93	1.00	349

$t_{(N-W)} = 0.65$; $p > .45$

Table 9-12. Percentage Distribution, Mean, and Standard Deviation of the Principal's Career Satisfaction (CS) Score by Religion

(N = 365)*

Religion	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Jewish	39%	36%	25%	1.86	1.11	36
Non-Jewish	38	33	29	1.94	1.00	329

* Data unavailable for 17 cases

$t_{(NJ-J)} = 0.46; p > .45$

Table 9-13. Percentage Distribution, Mean, and Standard Deviation of the Principal's Career Satisfaction (CS) Score by Three Categories of Religion

(N = 365)*

Religion	Principal's CS Score Low	Moderate	High	Mean CS Score	Standard Deviation	Number of Cases
Jewish	39%	36%	25%	1.86	1.11	36
Catholic	41	31	28	1.93	1.00	51
Protestant	37	33	30	1.94	1.01	278

* Data available for 17 cases

F = 0.10; p > .90

Socio-Economic Status of the Principal's Father

Hypothesis 9-6: Among men principals the higher their father's socio-economic status, the lower their career satisfaction.

To test this hypothesis, we shall use three separate indices of the socio-economic status of the principals' fathers: their occupation, education and income.[4] Table 9-14 reveals the findings when we cross-tabulated the occupation of the fathers of the principals with the principals' career satisfaction scores. They show that there are no significant differences in the mean CS scores of principals when they are categorized by occupation of father. The data also reveal no relationship between father's education and the principal's career satisfaction (Table 10-15). And when we examined the association between father's income and the principals career satisfaction (Table 10-16), we found that, contrary to our prediction, principals whose fathers had the highest rank on income also had the highest scores on CS. These findings, then, require us to reject the hypothesis that father's socio-economic status is negatively related to career satisfaction.

Table 9-14. Percentage Distribution, Mean, and Standard Deviation of the Principal's Career Satisfaction (CS) Score by Father's Occupation

(N = 358)*

Father's Occupation	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Professional or Managerial	34%	34%	32%	2.04	0.89	109
Clerical or Sales	39	28	33	1.94	1.06	46
Skilled or Semi-Skilled	35	34	31	1.98	1.07	111
Unskilled	46	27	27	2.02	0.90	22
Farmer	49	29	23	1.73	1.00	70

* Data unavailable for 24 cases

$t_{(U-P,M)} = -0.11; p > .50$

Table 9-15. Percentage Distribution, Mean, and Standard Deviation of the Principal's Career Satisfaction (CS) Score by Father's Education

(N = 379)*

	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
Father's Education	Low	Moderate	High			
Graduated from college	39%	32%	29%	2.05	0.79	44
Some college	49	34	17	1.68	0.93	41
Graduated from high school or some high school	32	41	27	1.94	1.02	130
Did not attend high school	39	27	34	1.99	1.02	164

* Data unavailable for 3 cases

$t_{(H-L)} = .03$; $p > .97$

Table 9-16. Percentage Distribution, Mean, and Standard Deviation of the Principal's Career Satisfaction (CS) Score by Father's Income Level at Time of Principal's High School Graduation

(N = 376)*

	Principal's CS Score					
Father's Income Level	Low	Moderate	High	Mean CS Score	Standard Deviation	Number of Cases
Highest 25% of community	23%	40%	37%	2.16	0.91	38
Second Highest 25% of community	39	30	31	1.98	0.97	99
Second Lowest 25% of community	42	32	26	1.86	1.03	185
Lowest 25% of community	33	37	30	2.05	0.97	54

* Data unavailable for six cases

$t_{(L-H)} = -0.55$; $p > .70$

Notes and References for Chapter Nine

1. See Appendix B, Table B-20, for technical details related to the development of the score, Gratification with the Social Status of the Principalship.

2. See Appendix B, Table B-21, for technical details related to the development of the score, Gratification with the Income Rewards of the Principalship.

3. Since measures of both _t_ variables are discrete-valued, Guttman-type scales, we performed non-parametric tests of significance when examining the relationship between the independent variable and the two Guttman-type intervening variables. More specifically, we employed a one-tailed chi-square test of association in Tables 9-4 and 9-5, regarding as statistically significant relationships with a probability less than .05 of occurring by chance.

4. The three indices of the socio-economic status of the principals' father were obtained from their responses to the following questions: What was your father's major life-time occupation? What was your father's highest educational attainment? What was the income position of your parents at the time of your graduate from high school (four response categories: from "highest 25% of our community" to "lowest 25% of our community")? For the response alternatives to each of these questions, see Neal Gross and Robert E. Herriott, _Staff Leadership in Public Schools: A Sociological Inquiry_ (New York: John Wiley & Sons, Inc., 1965), pp. 171-173.

Chapter 10: Determinants of Career Satisfaction: Hypotheses Based on Relative Gratification with Intrinsic Rewards

In the preceding chapter we examined hypotheses about correlates of the career satisfaction of principals that were based on a theoretical formulation that posited that their CS was in part a function of the differential gratification they derive from the *extrinsic* rewards of their position. Now we shall test a number of hypotheses about circumstances that may be related to career satisfaction that are tied to a theoretical explanation that assumes that their career satisfaction is in part a function of the differential gratification they derive from the *intrinsic* rewards of their work. Each of the hypotheses to be tested uses as an independent variable an organizational characteristic of the principals' work environment or one of his personal attributes that we know, from our earlier analyses of the determinants of intrinsic job satisfaction (Chapters 5, 6, 7), is related to his IJS. If career satisfaction is in fact a function of intrinsic job satisfaction, we reasoned that variables that are related to IJS would also be related to CS.

Since all the hypotheses to be tested in this chapter are based on the premise that the intervening variable, intrinsic job satisfaction, is positively related to the dependent variable, career satisfaction, it is relevant at the outset to inquire if IJS is in fact positively associated with CS.

The Relationship Between IJS and CS

Table 10-1 shows that there is a positive relationship between intrinsic job satisfaction and career satisfaction: column 5 of the table indicates that principals with the highest IJS scores had the highest mean score on career satisfaction (2.11) and those with the lowest IJS scores had the lowest mean score on career satisfaction (1.66). Furthermore, the difference of 0.45 units between the mean CS scores of the principals who placed highest in intrinsic job satisfaction and those who were lowest is significant statistically. We conclude, therefore, that the empirical evidence supports the assumption of a positive relationship between IJS and CS.

A Note on the Presentation of the Findings

As noted, each of the hypotheses to be tested in this chapter uses as an independent variable one that we already know is related to intrinsic job satisfaction, and now we want to determine if these variables are also related to career satisfaction. For each hypothesis to be tested, we first shall ascertain whether the findings support a relationship between the independent variable and career satisfaction. For the hypotheses that receive empirical support, we then want to find out if there is empirical support for the reasoning underlying them. We already know from analyses presented earlier that 2 of the 3 conditions required for intrinsic job satisfaction to serve as a possible explanatory or intervening variable have been met:

Table 10-1. Percentage Distribution, Mean, and Standard Deviation of the Principal's Career Satisfaction (CS) Score by Three Levels of His Score on Intrinsic Job Satisfaction

(N = 382)

Score on Intrinsic Job Satisfaction	Principal's CS Score Low	 Moderate	 High	Mean CS Score	Standard Deviation	Number of Cases
High	28%	34%	38%	2.11	1.07	127
Moderate	35	35	30	2.06	0.88	127
Low	50	30	20	1.66	1.03	128

$t_{(H-L)} = 3.38; p < .001$

(1) that the independent variable be related to it and (2) that IJS is related to the dependent variable, career satisfaction. The third condition required for IJS to serve as a possible explanatory variable is that when we re-examine the relationship between the independent and dependent variable, holding constant the intervening variable, IJS, then the magnitude of the initial relationship should decrease. As noted in chapter 8, we shall use the method of standardization to determine whether this condition is fulfilled.

For each analysis that supports a hypothesis, we shall present two tables: the first will show the findings about the original or zero-order relationship between the independent and dependent variable; the second will show the results when the original relationship is standardized for intrinsic job satisfaction. For hypotheses that are not supported we will, of course, present only the data bearing on the zero-order relationship.

One additional point: descriptions of the indices used to measure each of the independent variables to be considered in this chapter were presented in earlier chapters (Chapters 5, 6, or 7). Instead of describing again the procedure we used to measure each of the independent variable, we shall simply refer to the previous section of the report where we earlier described the procedure that was used to measure it.

Relationships with the Higher Administration

Autonomy

Hypothesis 10-1: The more autonomy a principal is granted by his superordinates, the greater his career satisfaction.

When the principals' scores on our index[1] of autonomy granted the principal are cross-tabulated with their CS scores, the findings do not support the hypothesis (Table 10-2). Although the mean CS score of the principals who receive the most autonomy is higher than that of those who receive the least (1.97 versus 1.80), the difference of .17 is not significant statistically.

Role Ambiguity in Relationships with Administrative Superiors

Hypothesis 10-2: The greater the role ambiguity a principal perceives in his relationship with his administrative superiors, the lower his career satisfaction.

Table 10-3A reveals that when we test the hypothesis with data obtained from the principals' responses to the question, "Speaking generally about the higher administration in your school system, how clear are the rules and regulations that influence your work?,"[2] it receives support. Thirty-five per cent of the principals who described the rules and regulations of the higher administration as "very clear" had high CS scores as compared to 20 per cent who described them as characterized by some degree of ambiguity. The hypothesis also receives support when we test it with their responses to a question[3] about the clarity of the division of labor in their relationships with their immediate administrative superior (Table 10-4A).

Table 10-2. Percentage Distribution, Mean, and Standard Deviation of the Principal's Career Satisfaction (CS) Score by Three Levels of the Higher Administration's Score on Autonomy Granted the Principal

(N = 380)*

Higher Administration's Score on Autonomy Granted Principal	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	33%	35%	33%	1.97	1.09	123
Moderate	36	33	31	2.04	0.91	130
Low	45	32	23	1.80	1.04	127

* Data unavailable for 2 cases.

$t_{(H-L)} = 1.27; p > .10$

Table 10-3. Principal's Career Satisfaction by Clarity of Higher Administration's Rules and Regulations: (A) Original Relationship; (B) Relationship Standardized on IJS

(N = 373)*

A. Original Relationship

Clarity of Rules and Regulations	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Very clear	35%	30%	35%	2.07	1.02	227
Not clear or fairly clear	41	39	20	1.74	0.99	146

*Data unavailable for 9 cases

$t_{(H-L)} = 3.10$; $p < .001$

B. Standardized Relationship

Clarity of Rules and Regulations	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
Very clear	37%	30%	34%	100%	227
Not clear or fairly clear	39	40	21	100	146

Table 10-4. Principal's Career Satisfaction by Clarity of Division of Labor in His Relationships with His Immediate Administrative Superior: (A) Original Relationship; (B) Relationship Standardized on IJS

(N = 375)*

A. Original Relationship

Clarity of Division of Labor	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Very clear	35%	33%	31%	2.01	1.01	307
Not clear or fairly clear	47	32	21	1.67	1.03	68

* Data unavailable for 7 cases

$t_{(H-L)} = 2.49$; $p < .007$

B. Standardized Relationship

Clarity of Division of Labor	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
Very clear	36%	34%	30%	100%	307
Not clear or fairly clear	43	35	22	100	68

Thirty-one per cent of the principals who described the division of labor as "very clear" had high CS scores as compared to 21 per cent who responded that there was considerable or some degree of ambiguity over "who was responsible for what" in their relationships with their immediate superiors. Since both relationships are statistically significant, we interpret the findings as supporting the hypothesis.

Can the relationship between role ambiguity and career satisfaction be attributed in part to the intervening variable of IJS? A comparison of the findings in Tables 10-3A with those of 10-3B reveals that IJS does have some effect on the original relationship since, when we standardize on IJS, the relationship between role ambiguity and CS does diminish. Whereas in the original relationship (Table 10-3A), the difference in low career satisfaction was six per cent between principals who described the rules and regulations under which they operate as "very clear" or "somewhat unclear," it drops to two per cent when we control (through standardization) for IJS. And whereas the difference in high career satisfaction was 15 per cent for the two categories of principals in the original relationship, it declines to 13 per cent when IJS is controlled. Similar results emerge when we compare the findings in Table 10-4A with those in Table 10-4B: the 12 per cent difference in low career satisfaction between principals who viewed the rules and regulations of the higher administration as characterized by different degrees of clarity drops to seven per cent when we control for IJS; and the 10 per cent difference in high career satisfaction between the two groups declines to eight per cent when we standardize on the intervening variable. We conclude, therefore, that there appears to be some basis in fact for the assumption that the explanation of the relationship between role ambiguity and career satisfaction may in part be attributed to IJS.

Decision-making Process of the Higher Administration

Hypothesis 10-3: The more effective a principal perceives the decision-making machinery of the higher administration, the greater the career satisfaction of the principal.

When an index[4] of the "quality" of the decision-making machinery of the higher administration in the school system in which the principal works is cross-tabulated with his CS score, the findings indicate support for the hypothesis: 39 per cent of the principals in the high group on effectiveness of the decision-making machinery of the central office as compared to 24 per cent in the low group have high CS scores (Table 10-5A). The difference in the mean CS scores of the two groups is significant statistically.

A comparison of the findings in Tables 10-5A and 10-5B indicates that if principals in the high and low categories on effectiveness of the decision-making apparatus of their higher administration did not differ on IJS, then the difference in low career satisfaction between the two groups would be reduced from 13 per cent to 10 per cent; and in the case of the difference in high career satisfaction, it would drop from 15 per cent to 12 per cent. In view of these findings, we conclude

Table 10-5. Principal's Career Satisfaction by Higher Administration's Score on Effectiveness of Decision-Making: (A) Original Relationship; (B) Relationship Standardized on IJS

(N = 382)

A. Original Relationship

Higher Administration's Score on Effectiveness of Decision-Making	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	30%	32%	39%	2.14	1.03	121
Moderate	40	34	26	1.93	0.89	130
Low	43	33	24	1.75	1.09	131

$t_{(H-L)} = 3.75; p < .001$

B. Standardized Relationship

Higher Administration's Score on Effectiveness of Decision-Making	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
High	31%	32%	37%	100%	121
Moderate	40	34	26	100	130
Low	41	34	25	100	131

that IJS does have some impact on the relationship between the principal's perceptions of the effectiveness of the decision-making apparatus of the higher administration and his CS.

Communications from the Higher Administration

Hypothesis 10-4: The more adequate a principal perceives the communications he receives from his administrative superiors, the greater his career satisfaction.

When the hypothesis is tested with a measure[5] of the adequacy of communications with the principal's own administrative superior, the data offer support for the hypothesis (Table 10-6A): 40 per cent of the principals who have the highest Adequacy of Communication scores as compared to 16 per cent who have the lowest scores were in the high group on career satisfaction. The difference in the mean CS scores of the high and low groups on adequacy of communications with their immediate administrative superiors is significant statistically.

The hypothesis also received support when we test it with an index[6] of the adequacy of the principals' communications with his school superintendent (Table 10-7A): 43 per cent of the principals whose superintendents received the highest Adequacy of Communication scores were in the high career satisfaction group as compared to 14 per cent of those whose superintendents received the lowest scores in this respect. The difference in the mean CS scores of the two groups of principals is statistically significant.

Table 10-6. Principal's Career Satisfaction by Immediate Administrative Superior's Score on Adequacy of Communications: (A) Original Relationship; (B) Relationship Standardized on IJS

(N = 374)*

A. Original Relationship

Immediate Superior's Score on Adequacy of Communications	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	26%	34%	40%	2.26	0.84	125
Moderate	37	32	31	1.99	0.98	124
Low	50	34	16	1.57	1.09	125

* Data unavailable for 8 cases

$t_{(H-L)} = 5.55; p < .001$

B. Standardized Relationship

Immediate Superior's Score on Adequacy of Communications	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
High	25%	36%	39%	100%	125
Moderate	37	32	31	100	124
Low	46	37	17	100	125

Table 10-7. Principal's Career Satisfaction by Superintendent's Score on Adequacy of Communications: (A) Original Relationship; (B) Relationship Standardized on IJS

(N = 374)*

A. Original Relationship

Superintendent's Score on Adequacy of Communications	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	22%	36%	43%	2.34	0.80	124
Moderate	38	32	30	2.00	0.96	125
Low	55	31	14	1.47	1.08	125

* Data unavailable for 8 cases

$t_{(H-L)} = 7.13; p < .001$

B. Standardized Relationship

Superintendent's Score on Adequacy of Communications	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
High	23%	36%	41%	100%	124
Moderate	38	33	30	100	125
Low	51	35	14	100	125

Can the observed career satisfaction differences noted in Tables 10-6A or 10-7A be accounted for in part by the IJS of the principals? When we control for IJS through the procedure of standardization, we find that the relationships between the two indices of adequacy of communication and CS do diminish. In the original relationship the difference in low career satisfaction between principals high and low on adequacy of communications with immediate administrative superior is 24 per cent and it drops to 21 per cent when we control for IJS (Tables 10-6A and 10-6B). There is a drop of two per cent (from 24 per cent to 22 per cent) when we compare the proportion of the two categories of principals who are high in career satisfaction in the original relationship and when it is standardized by IJS. A comparison of the findings in Tables 10-7A and 10-7B leads to similar conclusions: when we control for IJS there is a decline of five per cent in high career satisfaction and a two per cent drop in low career satisfaction in the proportion of principals high and low on adequacy of communications with their superintendents. In summary, we interpret the set of findings presented in this section as supporting the hypothesis that there is a positive association between a principal's perception of the adequacy of communications he receives from his administrative superiors and his career satisfaction and the possibility that IJS may in part account for this relationship.

Professional Stimulation from Above

Hypothesis 10-5: The greater the professional stimulation a principal receives from his administrative superiors, the greater the career satisfaction of the principal.

Table 10-8A reveals that the hypothesis is supported when we compare the CS of principals who varied on our summary measure[7] of the professional stimulation they receive from their immediate superiors; and Table 10-9A shows that it is supported when we test it by comparing their CS scores when the principals are categorized into three groups on the basis of an index[8] of the stimulation they receive from their superintendent. Table 10-8A indicates that 44 per cent of the principals who are in the top category on professional stimulation from immediate administrative superiors have high career satisfaction as compared to 16 per cent of those in the bottom group. And with respect to professional stimulation from the superintendent (Table 10-9A), the same comparison reveals that the difference between the top and bottom groups is only slightly smaller (41 per cent versus 16 per cent). Both relationships are significant statistically.

Can the relationships between the professional stimulation a principal receives from his administrative superiors as evidenced by these findings be explained in part by IJS? The answer is apparently "yes" for when we compare the original relationships with those that emerge when we control for IJS there are declines in the differences in low and high career satisfaction between principals who receive greater or lesser

Table 10-8. Principal's Career Satisfaction by Immediate Administrative Superior's Score on Professional Stimulation: (A) Original Relationship; (B) Relationship Standardized on IJS

(N = 374)*

A. Original Relationship

Immediate Superior's Score on Professional Stimulation	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	26%	30%	44%	2.26	0.90	124
Moderate	38	35	27	1.94	0.93	125
Low	50	34	16	1.62	1.11	125

[*] Data unavailable for 8 cases

$t_{(H-L)} = 5.03; p < .001$

B. Standardized Relationship

Immediate Superior's Score on Professional Stimulation	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
High	26%	32%	42%	100%	124
Moderate	37	35	27	100	125
Low	47	35	18	100	125

Table 10-9. Principal's Career Satisfaction by Superintendent's Score on Professional Stimulation: (A) Original Relationship; (B) Relationship Standardized on IJS

(N = 373)*

A. Original Relationship

Superintendent's Score on Professional Stimulation	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	25%	33%	41%	2.30	0.82	128
Moderate	40	33	28	1.89	0.96	123
Low	51	33	16	1.59	1.12	122

* Data unavailable for 9 cases

$t_{(H-L)} = 5.73; p < .001$

B. Standardized Relationship

Superintendent's Score on Professional Stimulation	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
High	26%	34%	40%	100%	128
Moderate	40	32	28	100	123
Low	47	34	19	100	122

amounts of professional stimulation from either their immediate boss or their superintendent. The 24 per cent difference in low career satisfaction between principals who reported the most and least professional stimulation from their immediate superiors in the original relationship drops to 21 per cent when it is standardized for IJS; and whereas the difference in high career satisfaction between the two groups in the original relationship is 28 per cent, it declines to 24 per cent when IJS is controlled (Tables 10-8A and 10-8B). The findings are similar when we compare the data in Tables 10-9A and 10-9B: the 26 per cent difference in low CS between principals who claimed they received the most and least professional stimulation in the original relationship declines to 21 per cent in the standardized table; and the 25 per cent difference in high career satisfaction between the two groups of principals drops to 21 per cent when we control for IJS. We conclude that there apparently is some justification for the assumption that IJS may "interpret" in part the positive association between professional stimulation received from higher administrators and the CS of principals.

Social-emotional Support from Higher Administrative Officials

Hypothesis 10-6: The more social-emotional support a principal receives from his administrative superiors, the greater the career satisfaction of the principal.

This hypothesis also receives support when we test it with indices[9] of the social-emotional support principals receive from their immediate superiors and from the superintendent. Forty-two per cent of the administrators who received relatively strong support of this kind from their immediate bosses have high career satisfaction as compared to 19 per cent of those who obtained relatively weak support from them (Table 10-10A); and Table 10-11A shows that over twice the proportion of the principals who were categorized as receiving relatively strong support from their superintendent have high CS scores as do those who were classified as receiving relatively weak support (40 per cent versus 19 per cent). Both relationships are significant statistically.

When we control for IJS to determine if it may account in part for either of these relationships, we find that the evidence offers some support for this possibility. When we standardize for IJS, the original relationships between the social-emotional support the principal obtains from his immediate superior and his superintendent and his career satisfaction both diminish. The difference in low career satisfaction between principals who were classified as relatively high and relatively low on social-emotional support received from their immediate administrative superior dropped from 30 per cent to 27 per cent and the difference in high career satisfaction declined from 23 to 18 per cent (Tables 10-10B and 10-10A). The 30 per cent difference in low CS between principals when they were categorized as relatively high or low on this type of support from their superintendent dropped to 26 per cent and the 21 per cent difference in high CS declined to 16 per cent (Tables 10-11B and 10-11A). We conclude that the observed positive relationships between social-emotional support received from higher administrators and CS may be accounted for in part by IJS.

Table 10-10. Principal's Career Satisfaction by Immediate Administrative Superior's Score on Social-Emotional Support: (A) Original Relationship; (B) Relationship Standardized on IJS

(N = 374)*

A. Original Relationship

Immediate Superior's Score on Social-Emotional Support	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	22%	36%	42%	2.28	0.89	124
Moderate	40	35	26	1.95	0.89	124
Low	52	29	19	1.59	1.13	126

* Data unavailable for 8 cases

$t_{(H-L)} = 5.28; p < .001$

B. Standardized Relationship

Immediate Superior's Score on Social-Emotional Support	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
High	22%	39%	39%	100%	124
Moderate	40	34	26	100	124
Low	49	30	21	100	126

Table 10-11. Principal's Career Satisfaction by Superintendent's Score on Social-Emotional Support: (A) Original Relationship; (B) Relationship Standardized on IJS

(N = 372)*

A. Original Relationship

Superintendent's Score on Social-Emotional Support	Principal's CS Score Low	Moderate	High	Mean CS Score	Standard Deviation	Number of Cases
High	25%	35%	40%	2.24	0.90	126
Moderate	34	38	28	2.02	0.90	122
Low	55	26	19	1.55	1.12	124

* Data unavailable for 10 cases

$t_{(H-L)} = 5.31; p < .001$

B. Standardized Relationship

Superintendent's Score on Social-Emotional Support	Career Satisfaction Low	Moderate	High	Total Percent	Number of Cases
High	27%	36%	37%	100%	126
Moderate	34	38	28	100	122
Low	53	26	21	100	124

Routine Managerial Support

Hypothesis 10-7: The greater the routine managerial support a principal receives from his administrative superiors, the greater the career satisfaction of the principal.

The findings offer support for the hypothesis when we test it with measures[10] of the routine managerial support the principals receive from their immediate administrative superiors or their superintendents: 38 per cent of the principals with relatively high support of this kind from their immediate bosses have high CS scores in comparison with 18 per cent with relatively low support of this kind (Table 10-12A); and 39 per cent of those whose superintendents were categorized as relatively high in administrative support versus 16 per cent of the principals whose superintendents were rated relatively low in this respect have high CS scores (Table 10-13A).

When we re-examine the original relationships, controlling for IJS, we again find that they decline. The difference in low career satisfaction between principals who receive strong and weak routine administrative support from their immediate boss in the original relationship is 24 per cent and it drops to 20 per cent when we control for IJS; the difference in high career satisfaction between the two groups changes from 20 to 18 per cent when we control for the intervening variable (Tables 10-12A and 10-12B). Highly similar findings occur when we control for IJS in re-examining the original relationship between the routine administrative support the principal obtains from his superintendent

Table 10-12. Principal's Career Satisfaction by Immediate Administrative Superior's Score on Routine Administrative Support: (A) Original Relationship; (B) Relationship Standardized on IJS

$(N = 374)^*$

A. Original Relationship

Immediate Superior's Score on Routine Administrative Support	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	26%	35%	38%	2.22	0.88	125
Moderate	37	33	30	1.98	1.01	125
Low	50	32	18	1.62	1.07	124

* Data unavailable for 8 cases

$t_{(H-L)} = 4.77;\ p < .001$

B. Standardized Relationship

Immediate Superior's Score on Routine Administrative Support	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
High	26%	35%	39%	100%	125
Moderate	37	33	30	100	125
Low	46	33	21	100	124

Table 10-13. Principal's Career Satisfaction by Superintendent's Score on Routine Administrative Support: (A) Original Relationship; (B) Relationship Standardized on IJS

(N = 372)*

A. Original Relationship

Superintendent's Score on Routine Administrative Support	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	27%	34%	39%	2.20	0.95	127
Moderate	37	33	30	1.99	0.98	122
Low	52	32	16	1.60	1.03	123

* Data unavailable for 10 cases

$t_{(H-L)} = 4.77$; $p < .001$

B. Standardized Relationship

Superintendent's Score on Routine Administrative Support	Principal's CS Score			Total Percent	Number of Cases
	Low	Moderate	High		
High	28%	34%	38%	100%	127
Moderate	37	33	31	100	122
Low	49	33	18	100	123

(Tables 10-13A and 10-13B). We conclude once more that IJS does appear to have some influence on the observed relationships between the independent and dependent variables.

Importance Attributed to the Principal's Work by Higher Administrators

Hypothesis 10-8: The more importance a principal perceives his administrative superiors attribute to his work, the greater the career satisfaction of the principal.

Two factor scores, one with reference to the importance principals perceive their immediate superiors attribute to their work and the other pertaining to their view of their superintendents in this respect, were used to test the hypothesis. When we examined the relationship between the factor score,[11] Importance Attributed to the Principal's Work by Immediate Administrative Superior, and the CS score, the findings indicated support for the hypothesis: 40 per cent of the principals who were in the high category on this index of the importance their immediate superior attributed to their work have high CS scores as compared to 20 per cent of those who were in the low category (Table 10-14A). When we tested the hypothesis with the factor score,[12] Importance Attributed to the Principal's Work by the Superintendent, the data also supported it (Table 10-15A): 41 per cent of the principals with the highest factor scores have high CS scores in comparison to 19 per cent with the lowest factor scores. The observed relationships in both tables are significant statistically.

Table 10-14. Principal's Career Satisfaction by Immediate Administrative Superior's Score on Importance Attributed to Principal's Work: (A) Original Relationship; (B) Relationship Standardized on IJS

(N = 374)*

A. Original Relationship

Immediate Superior's Score on Importance Attributed to Principal's Work	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	30%	31%	40%	2.20	0.85	147
Moderate	32	43	25	2.03	0.82	102
Low	51	29	20	1.56	1.22	125

* Data unavailable for 8 cases

$t_{(H-L)} = 5.14$; $p < .001$

B. Standardized Relationship

Immediate Superior's Score on Importance Attributed to Principal's Work	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
High	32%	30%	38%	100%	147
Moderate	32	42	26	100	102
Low	48	29	23	100	125

Table 10-15. Principal's Career Satisfaction by Superintendent's Score on Importance Attributed to Principal's Work: (A) Original Relationship; (B) Relationship Standardized on IJS

$(N = 373)^*$

A. Original Relationship

Superintendent's Score on Importance Attributed to Principal's Work	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	28%	31%	41%	2.28	0.80	128
Moderate	36	38	26	1.96	0.90	115
Low	51	31	19	1.56	1.17	130

* Data unavailable for 9 cases

$t_{(H-L)} = 5.66; p < .001$

B. Standardized Relationship

Superintendent's Score on Importance Attributed to Principal's Work	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
High	31%	31%	38%	100%	128
Moderate	36	37	26	100	115
Low	48	32	20	100	130

When we re-examine the relationships between the independent variables and CS in these two tables, controlling for IJS, we find again that they both drop (Tables 10-14A and 10-14B; Tables 10-15A and 10-15B). There is a decline of five per cent in both high and low career satisfaction when we compare the proportion of principals whose immediate superiors attribute most and least importance to their work. The drop in high career satisfaction is six per cent and four per cent for low satisfaction when the comparison is made for the administrators whose superintendents are relatively high or low in this respect. We conclude, then, that the relationships demonstrated between the importance a principal perceives his administrative superiors attribute to his work and his CS are influenced to some extent by IJS.

Relationships with Subordinates

Teacher's Classroom Performance

Hypothesis 10-9: The higher a principal's evaluation of the classroom performance of his teachers, the greater his career satisfaction.

Table 10-16A reports the relationship between an index[13] of the principal's view of the quality of his teachers' performance and his CS score. The findings provide support for the hypothesis: the mean CS score (2.16) of principals who have the highest assessment of the performance of their staff is higher than that (1.91) of those who have the lowest evaluation of it and the difference of 0.25 is significant statistically.

Table 10-16. Principal's Career Satisfaction by Teachers' Score on Quality of Classroom Performance: (A) Original Relationship; (B) Relationship Standardized on IJS

(N = 379)*

A. Original Relationship

Teachers' Score on Quality of Classroom Performance	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	30%	34%	36%	2.16	0.87	125
Moderate	45	27	28	1.79	1.13	127
Low	39	38	24	1.91	0.92	127

* Data unavailable for 3 cases

$t_{(H-L)} = 2.50; p < .01$

B. Standardized Relationship

Teachers' Score on Quality of Classroom Performance	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
High	27%	34%	38%	100%	125
Moderate	40	28	33	100	127
Low	33	38	29	100	127

Table 10-16B shows the findings when we re-examine the relationship between the principal's evaluation of his teachers' classroom performance and CS, holding constant IJS through standardization. A comparison of the findings in Tables 10-16A and 10-16B reveals that controlling for IJS does lower the relationship for there is a three per cent decline in both low and high career satisfaction between the proportions of principals who have a relatively high and relatively low evaluation of staff performance.

Staff Orientation to Innovation

Hypothesis 10-10: The more a principal perceives his staff as interested in innovations, the greater his career satisfaction.

When we cross-tabulate an index[14] of the principals' perceptions of their teachers' attitudes toward innovations with their own CS scores, the findings provide support for the hypothesis (Table 10-17A): the more positive principals view the attitudes of their teachers toward innovation, the greater their career satisfaction. The difference of 0.23 between the mean CS score of principals whose staffs received the highest (2.09) and lowest (1.86) scores on interest in innovations is in the predicted direction and is significant statistically.

When we control for IJS through standardization (Table 10-17B) and compare the findings with those that emerged in the original relationship (Table 10-17A), we observe a drop of four per cent in high and in low career satisfaction when we compare the proportion of administrators

Table 10-17. Principal's Career Satisfaction by Teachers' Score on Interest in Innovation: (A) Original Relationship; (B) Relationship Standardized on IJS

(N = 379)*

A. Original Relationship

Teachers' Score on Interest in Innovation	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	33%	32%	35%	2.09	0.99	126
Moderate	40	29	31	1.91	1.01	127
Low	40	38	22	1.86	0.97	126

* Data unavailable for 3 cases

$t_{(H-L)} = 1.84; p < .03$

B. Standardized Relationship

Teachers' Score on Interest in Innovation	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
High	31%	32%	37%	100%	126
Moderate	36	30	35	100	127
Low	34	39	28	100	126

who view their staffs as having most and least interest in innovations. We interpret these findings as supporting the possibility that IJS does have some bearing on the original relationship.

Teacher's Personal Support of the Principal

Hypothesis 10-11: The greater the personal support a principal perceives he receives from his staff, the greater his career satisfaction.

When a factor score[15] is used as an index of the principal's perception of personal support from his staff, the hypothesis does not receive support (Table 10-18). Although the difference between the mean CS scores of those who felt they received the most and least support (2.03 versus 1.92) is in the predicted direction, the difference in their mean scores is not significant statistically.

Hypothesis 10-12: The more the principal perceives that his teachers are committed to their work, the greater the career satisfaction of the principal.

Table 10-19A shows the findings when a summary measure[16] of the principals' views of staff commitment to their work is cross-tabulated with their CS scores. Those administrators whose teachers were classified as in the top group on commitment have a higher mean CS score than those whose staffs were in the bottom group in this respect (2.09 versus 1.78) and the difference is significant statistically.

When we re-examine the original relationship, controlling for IJS,

Table 10-18. Principal's Career Satisfaction by Teachers' Score on Personal Support of Principal

(N = 382)

Teachers' Score on Personal Support of Principal	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	36%	33%	31%	2.03	0.89	126
Moderate	39	37	24	1.87	1.03	128
Low	39	29	32	1.92	1.10	128

$t_{(H-L)} = 0.83; p > .20$

Table 10-19. Principal's Career Satisfaction by Teachers' Score on Commitment to Their Work: (A) Original Relationship; (B) Relationship Standardized on IJS

(N = 379)*

A. Original Relationship

Teachers' Score on Commitment to Work	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	27%	32%	41%	2.09	0.84	127
Moderate	39	31	30	1.99	0.99	126
Low	33	36	31	1.78	1.12	126

* Data unavailable for 3 cases

$t_{(H-L)} = 2.45; p < .005$

B. Standardized Relationship

Teachers' Score on Commitment to Work	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
High	35%	32%	33%	100%	127
Moderate	34	32	33	100	126
Low	32	36	34	100	126

the six per cent difference in low CS in the original relationship drops to three per cent and the 10 per cent difference in high satisfaction drops to one per cent (Tables 10-19A and 10-19B). We conclude that there is some basis in fact to support the contention that the original relationship may be explained in part by IJS.

Personal Characteristics

Self-conception of Abilities

Hypothesis 10-13: The higher a principal's evaluation of his skills as an educational administrator, the greater his career satisfaction.

In testing this hypothesis we shall use the principals' self-assessment of their skills in three major aspects of their work: (1) their ability to offer educational leadership to their staffs; (2) their ability to deal with their routine managerial tasks; and (3) their skill in handling the human relations problems of their organizations.[17]

When the principals' scores on an index of self-assessment of their ability to offer educational leadership to their staffs are cross-tabulated with their CS scores, the findings support the hypothesis (Table 10-20A). The difference between the mean CS scores of those who have the highest and lowest self-assessment of their ability in this regard (2.14 versus 1.81) is in the predicted direction and is significant statistically. The hypothesis did not receive support when we used a summary measure of the principals' self-assessment of their ability to deal with the routine managerial tasks of their organizations. In this

Table 10-20. Principal's Career Satisfaction by His Score on Self-Assessment of Educational Leadership

(N = 379)*

A. Original Relationship

Score on Self-Assessment of Educational Leadership	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	30%	30%	40%	2.14	0.99	83
Moderately High	34	34	33	2.04	1.00	92
Moderately Low	43	36	21	1.81	1.04	98
Low	43	32	25	1.81	1.00	106

* Data unavailable for 3 cases

$t_{(H-L)} = 2.25$; $p < .01$

B. Standardized Relationship

Score on Self-Assessment of Educational Leadership	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
High	35%	25%	40%	100%	83
Moderately High	34	34	32	100	92
Moderately Low	42	35	22	100	98
Low	39	32	29	100	106

case the difference in the mean CS scores of the principals with the highest and lowest self-assessment is in the predicted direction (2.02 versus 1.90) but the difference of 0.12 in their mean scores is not significant statistically (Table 10-21). When we test the hypothesis with an index of their self-assessment of their human relations skills, however, the data do support it (Table 10-22A): the principals with the highest self-assessment on this criterion have a mean CS score of 2.17 as compared to 1.65 for those with the lowest self-evaluation and the difference of 0.52 is significant statistically.

Does the association between the principals' self-assessment of their ability to offer educational leadership to their staff and CS decline when we control for IJS? A comparison of the findings presented in Tables 10-20A and 10-20B reveals that it does. The difference of 13 per cent in low career satisfaction between principals highest and lowest in their self-assessments drops to four per cent when we control for IJS and the difference of 15 per cent in high satisfaction between these two groups declines to 11 per cent.

Does the original relationship between the principals' self-evaluation of their human relations skills and CS also decline when we standardize on CS? The difference of 22 per cent in low CS between principals highest and lowest in their self-assessment in the original relationship (Table 10-22A) drops to 20 per cent in the standardized table (Table 10-22B) and the 23 per cent difference in high career satisfaction between the two categories of principals drops to 18 per cent.

We conclude from these findings that self-assessments on ability to

Table 10-21. Principal's Career Satisfaction by His Score on Self-Assessment in Dealing with Routine Managerial Tasks

(N = 379)*

Score on Self-Assessment in Dealing with Routine Managerial Tasks	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	33%	29%	38%	2.02	1.16	100
Moderately High	38	35	27	1.98	0.94	96
Moderately Low	38	39	23	1.85	0.98	95
Low	44	28	27	1.90	0.96	88

* Data unavailable for 3 cases

$t_{(L-H)} = 0.81; p > .20$

Table 10-22. Principal's Career Satisfaction by His Score on Self-Assessment of Human Relations Skills

(N = 379)*

A. Original Relationship

Score on Self-Assessment of Human Relations Skills	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	31%	28%	42%	2.17	1.01	91
Moderately High	42	35	23	1.89	0.95	99
Moderately Low	27	41	32	2.05	0.91	96
Low	53	28	19	1.65	1.13	93

* Data unavailable for 3 cases

$t_{(H-L)} = 3.31; p < .001$

B. Standardized Relationship

Score on Self-Assessment of Human Relations Skills	Career Satisfaction			Total Percent	Number of Cases
	Low	Moderate	High		
High	31%	29%	40%	100%	91
Moderately High	43	34	23	100	99
Moderately Low	26	41	33	100	96
Low	51	27	22	100	93

offer educational leadership and self-evaluation on skills in human relations are positively related to CS but self-assessment of ability to deal with routine managerial tasks is not related to it. We also conclude that IJS may account in part for the two observed positive relationships.

Conformity to Role Expectations

Hypothesis 10-14: The more a principal's role performance conforms to his own definition of his role, the greater his career satisfaction.

In testing this hypothesis we shall use two indices[18] of the principal's conformity to his own role definition: first, the degree to which he conforms to his self-expectations with respect to closeness of supervision of his teachers; and second, his conformity to his definition of his role with respect to his obligation to encourage the introduction of innovations into his school. The findings reveal that although those principals with the highest scores on the index of conformity to role definition with respect to closeness of supervision have the highest mean CS score, their average CS score is not significantly different from the one obtained by the principals with the lowest scores on this measure of conformity to role definition (Table 10-23). Similar findings emerge when we examine the relationship to career satisfaction of the index of his conformity to his role expectations in regard to his obligation to introduce innovations into his school (Table 10-24). We conclude, therefore, that the empirical findings do not support the hypothesis.

Table 10-23. Principal's Career Satisfaction by Conformity to His Role Definition with Respect to Closeness of Supervision

$(N = 380)^*$

Score on Conformity to Principal's Role Definition	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	32%	37%	32%	2.10	0.79	89
Moderate	43	27	30	1.90	1.02	139
Low	36	37	27	1.89	1.12	152

* Data unavailable for 2 cases

$t_{(H-L)} = 1.58; p > .06$

Table 10-24. Principal's Career Satisfaction by Conformity to His Role Definition with Respect to Support of Innovations

(N = 377)*

Score on Conformity to Principal's Role Definition	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	36%	33%	31%	2.00	0.92	78
Moderate	36	35	30	1.99	1.02	138
Low	41	31	28	1.87	1.06	161

* Data unavailable for 5 cases

$t_{(H-L)} = 0.95$; $p > .17$

Equalitarianism

Hypothesis 10-15: *The more equalitarian a principal is in his orientation to others, the greater the career satisfaction of the principal.*

Table 10-25 shows that when an index[19] of the principals' equalitarianism developed from their responses to *The Value Profile* is related to their career satisfaction, the hypothesis receives no empirical support: the mean CS scores of the principals in the highest and lowest categories on this value orientation are highly similar.

Acceptance of Authority

Hypothesis 10-16: *The greater a principal's acceptance of authority, the higher the career satisfaction of the principal.*

The findings presented in Table 10-26A show that the hypothesis does receive support. The data reveal that principals with the highest scores on an index[20] of acceptance of authority obtained the highest mean CS score (2.10) and those with the lowest score on this value orientation the lowest mean CS score (1.83). The difference between these groups of 0.27 units on the CS score is significant statistically.

When we control for IJS (Table 10-26B) to ascertain if it could account in part for the relationship, the findings reveal that the differences in low career satisfaction between the proportion of principals whose scores on acceptance of authority are relatively high or low drops by three per cent when we compare the findings in the standardized table with those in the original one (Tables 10-26B and 10-26A); however, the

Table 10-25. Principal's Career Satisfaction by His Value Orientation on Equalitarianism

(N = 382)

Score on Equalitarianism	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
High	36%	36%	28%	1.94	1.05	129
Moderate	39	31	30	1.98	0.91	126
Low	39	32	30	1.90	1.07	127

$t_{(H-L)} = 0.31; p > 0.15$

Table 10-26. Principal's Career Satisfaction by His Value Orientation on Acceptance of Authority: (A) Original Relationship; (b) Relationship Standardized by IJS

(N = 382)

A. Original Relationship

Score on Equalitarianism	Principal's CS Score: Low	Moderate	High	Mean CS Score	Standard Deviation	Number of Cases
High	30%	40%	30%	2.10	0.84	127
Moderate	43	33	24	1.89	1.00	128
Low	41	26	33	1.83	1.16	127

$t_{(H-L)} = 2.05$; $p < .02$

B. Standardized Relationship

Score on Equalitarianism	Career Satisfaction: Low	Moderate	High	Total Percent	Number of Cases
High	32%	40%	28%	100%	127
Moderate	42	33	25	100	128
Low	40	27	33	100	127

difference between these two groups increases by two per cent when we make the same comparison on high career satisfaction. We conclude that IJS has no apparent impact on the zero-order relationship.

Time Commitment

Hypothesis 10-17: The more off-duty time a principal devotes to his job, the greater his career satisfaction.

When we tabulated the number of nights per week the principals reported they typically spent on school business, we found that the findings did not support the hypothesis (Table 10-27). They revealed that, contrary to the prediction, the principals who stated that they spent no evenings on school affairs have the highest mean CS score (2.22) and the next highest mean score (2.19) was obtained by those who spent most evenings on it. The data in Table 10-28 suggest that the amount of off-duty time principals devote to their work may be related to CS in a curvilinear manner. To explore this possibility, we calculated an F-test to ascertain if there were statistically significant differences among the four mean CS scores reported in the table. The findings indicated that there were. We conclude that the data offer no support for the hypothesis that the amount of off-duty time a principal devotes to his work is positively associated with CS but that they do tend to indicate a curvilinear relationship between the two variables.

Table 10-27. **Principal's Career Satisfaction and the Number of Nights Per Week Devoted to School Business at Home**

(N = 380)*

Number of Nights Per Week Devoted to School Business at Home	Principal's CS Score			Mean CS Score	Standard Deviation	Number of Cases
	Low	Moderate	High			
Four or more	30%	26%	44%	2.19	0.94	50
Two or three	35	34	31	1.99	0.99	146
One	49	31	20	1.85	1.01	146
None	18	47	34	2.22	0.82	38

*Data unavailable for two cases.

$t_{(H-L)} = -0.15$; $p > .50$

$F = 4.09$; $p < .007$

Notes and References for Chapter Ten

1. For a description of the index, Autonomy Granted by Superordinates, see Chapter 5 (Hypothesis 5-1) and Appendix B (Table B-2).

2. See Chapter 5, Hypothesis 5-2 for the response alternatives to this question.

3. See Chapter 5, Hypothesis 5-2 for the response alternatives to this question.

4. For a description of the index, Adequacy of the Higher Administration's Decision-making Process, see Chapter 5 (Hypothesis 5-3) and Appendix B (Table B-3).

5. For a description of the index, Adequacy of Communications from Immediate Administrative Superior, see Chapter 5 (Hypothesis 5-4) and Appendix B (Table B-4).

6. For a description of the index, Adequacy of Communications from Superintendent, see Chapter 5 (Hypothesis 5-4) and Appendix B (Table B-5).

7. For a description of the summary measure, Professional Stimulation from Immediate Administrative Superior, see Chapter 5 (Hypothesis 5-5) and Appendix B (Table B-6).

8. For a description of the summary measure, Professional Stimulation from Superintendent, see Chapter 5 (Hypothesis 5-5) and Appendix B (Table B-7).

9. For a description of the indices, Social-emotional Support Received from Immediate Administrative Superior and Social-emotional Support Received from Superintendent, see Chapter 5 (Hypothesis 5-6) and Appendix B (Tables B-8 and B-9).

10. For a description of the indices, Routine Managerial Support

Received from Immediate Administrative Superior and Routine Managerial Support Received from Superintendent, see Chapter 5 (Hypothesis 5-7) and Appendix B (Tables B-10 and B-11).

11. For a description of the factor score, Importance Attributed to Principal's Work by Immediate Administrative Superior, see Chapter 5 (Hypothesis 5-8) and Appendix B (Table B-12).

12. For a description of the factor score, Importance Attributed to Principal's Work by Superintendent, see Chapter 5 (Hypothesis 5-8) and Appendix B (Table B-13).

13. For a description of this index, see Chapter 6, Table 6-1.

14. For a description of this index, see Chapter 6, Table 6-3.

15. For a description of this index, see Chapter 6, Table 6-5.

16. For a description of this index, see Chapter 6, Table 6-9.

17. For a description of these three self-assessment indices, see Chapter 7 (Hypothesis 7-1) and Appendix B (Tables B-14, B-15, and B-16).

18. For a description of the two indices of the principal's conformity to his definition of his role, see Chapter 7 (Hypothesis 7-2).

19. For a description of the index, Equalitarianism, see Chapter 7 (Hypothesis 7-3) and Appendix B (Table B-17).

20. For a description of the index, Acceptance of Authority, see Chapter 7 (Hypothesis 7-4) and Appendix B (Table B-18).

Chapter 11: Summary and Conclusions

The basic objectives of this inquiry were to investigate possible determinants of the Intrinsic Job Satisfaction and Career Satisfaction of men school principals. The Intrinsic Job Satisfaction (IJS) of school administrators was defined as the degree of gratification they derive from performing their managerial tasks and their Career Satisfaction (CS) had reference to the degree of gratification they derive from having chosen educational administration as a career.

The investigation of the IJS and CS of principals constituted an extension of the National Principalship Study, a program of research concerned with a wide range of issues pertaining to school principals in American cities with a population of 50,000 and over. Data were obtained from personal interviews and other techniques in 1960-1961 from a national cross-section of 501 principals in 41 cities in all regions of the United States as well as from their administrative superiors and their teachers. The findings of the IJS and CS inquiries are based on data obtained from the 382 men principals who participated in the National Principalship Study.

The index used to measure the Intrinsic Job Satisfaction of the principals was based on a factor score derived from their responses to an Enjoyment of Work Activities Instrument. The summary measure of Career Satisfaction was developed from a factor score derived from their responses to items in a Satisfaction with Conditions of Work and Career Instrument.

Determinants of Intrinsic Job Satisfaction

All of the hypotheses examined in the IJS study were based on the following assumptions and reasoning: (1) two major prepotent psychological needs of managerial personnel are the need for autonomy and the need for self-actualization; (2) IJS is primarily a function of the degree to which they are able to gratify these needs through their role performance; (3) role performance characterized by independence of action, creativity, task accomplishment, and consistency has special importance for satiating these psychological needs; and (4) if these assumptions are tenable then IJS will be a function in part of conditions that will serve to increase or decrease the likelihood that principals will exhibit these four kinds of role performance.

The empirical findings of the IJS study provided support for the following hypotheses about correlates of the IJS of men principals:

1. The more autonomy a principal is granted by his superordinates, the greater his IJS.
2. The greater the role ambiguity a principal perceives in his relationships with his administrative superiors, the lower his IJS.
3. The more effective a principal perceives the decision-making machinery of the higher administration, the greater the IJS of the principal.
4. The more adequate a principal perceives the communications he receives from his administrative superiors, the greater his IJS.

5. The greater the professional stimulation a principal receives from his administrative superiors, the greater the IJS of the principal.
6. The more social-emotional support a principal receives from his administrative superiors, the greater the IJS of the principal.
7. The greater the routine managerial support a principal receives from his administrative superiors, the greater the IJS of the principal.
8. The more importance a principal perceives his administrative superiors attribute to his work, the greater the IJS of the principal.
9. The higher a principal's evaluation of the classroom performance of his teachers, the greater his IJS.
10. The more a principal perceives his staff as interested in innovations, the greater his IJS.
11. The greater the personal support a principal perceives he receives from his staff, the greater his IJS.
12. The more the principal perceives that his teachers are committed to their work, the greater the IJS of the principal.
13. The higher a principal's evaluation of his skills as an educational administrator, the greater his IJS.
14. The more equalitarian a principal is in his orientation to others, the greater his IJS.
15. The greater a principal's acceptance of authority, the higher his IJS.

16. The more off-duty time a principal devotes to his job, the greater his IJS.

The data did not provide support for the following hypothesis: the more harmonious a principal perceives the interpersonal relations among his staff, the greater his IJS. In addition, the findings provided only partial support for the hypothesis that the more a principal's role performance conforms to his own definition of his role, the greater his IJS.

Analyses were also carried out of the relationship to Intrinsic Job Satisfaction of a number of independent variables which were not included in the hypotheses derived from the theoretical formulation of the IJS investigation. The results of this part of the study may be summarized as follows:

1. The following characteristics of the principals' schools were not associated with their IJS: school level (elementary, junior, and senior high), numbers of pupils, region, and socioeconomic composition of the student body.
2. There was no relationship between the three following indices of the principals' formal academic training and their IJS: number of graduate education courses, number of courses in educational administration, and the highest academic degree they had achieved.
3. The findings revealed that previous teaching experience and the amount of administrative experience were not related to the principals' IJS.
4. Age was not related to IJS.

5. Religion was associated with IJS: the Jewish principals had the highest average IJS score, Catholic principals were next highest, and Protestant principals obtained the lowest average IJS score.
6. Race was related to IJS: Negro principals had higher scores on the average than white principals.

Determinants of Career Satisfaction

The CS study tested hypotheses based on two different lines of reasoning. The first was based on the assumption that the explanation of variation in career satisfaction among principals may be found in their differential gratification with the extrinsic rewards of their position; the second attributed the explanation to the differential intrinsic rewards they derive from their work.

Of the six hypotheses tested about correlates of the career satisfaction of men principals based on the "extrinsic rewards" theory, only two received empirical support. The first was that the higher the occupational aspirations of principals, the lower their career satisfaction; the second was that among men principals the earlier the age at which they first became a principal the less their career satisfaction. The findings also offered support for the reasoning underlying the occupational aspirations hypothesis: two indices of the intervening variable, gratification with "extrinsic rewards" of the principalship, were negatively associated with the principals' level of aspiration and positively related to their CS; and when the original relationship between level of aspiration and CS was re-examined, controlling for measures of the posited intervening variable, the relationship between the independent and dependent variables declined. An intervening variable analysis, however, required rejection of the assumptions underlying the hypothesis that specified a positive relationship between the age at which the administrators first became principals and their CS.

The four hypotheses based on the "extrinsic rewards" theory that the findings did not support involved the following independent variables: highest academic degree, age, race, religion, and the socioeconomic status of the principals' fathers. The data revealed that none of these independent variables were related to the principals' Career Satisfaction.

Seventeen hypotheses based on an "intrinsic rewards" explanation of the determinants of Career Satisfaction were tested and 12 of them received empirical support. The findings revealed that measures of the following independent variables were related to the CS of principals in the manner specified below:

1. Perceived role ambiguity in relationship with administrative superiors -- negatively related to CS.
2. Perceived effectiveness of the decision-making machinery of the higher administration -- positively related to CS.
3. Perceived adequacy of communications from administrative superiors -- positively related to CS.
4. Professional stimulation from administrative superiors -- positively related to CS.

5. Social-emotional support received from higher administrative officials -- positively related to CS.
6. Routine managerial support received from administrative superiors -- positively related to CS.
7. Principals' perception of the importance administrative superiors attribute to his work -- positively related to CS.
8. Principal's evaluation of the classroom performance of his teachers -- positively related to CS.
9. Principal's perception of his staff's interest in innovations -- positively related to CS.
10. Principal's perception of his teachers' commitment to their work -- positively related to CS.
11. Principal's self-evaluation of his ability to offer educational leadership and his self-evaluation of his human relations skills -- positively related to CS.
12. Principal's acceptance of authority -- positively related to CS.

For each of these relationships, intervening variable analysis revealed that the intrinsic rewards principals derive from their work, i.e., their IJS, may play a part in accounting for the relationship between the independent variable and career satisfaction. The findings also indicate that other circumstances and conditions, still to be isolated, apparently also need to be taken into account in explanations of these relationships.

The following variables, each of which was predicted to be positively related to CS on the basis of the intrinsic rewards theory, however, were not associated with career satisfaction: autonomy granted the principal by the higher administration, personal support received from staff, self-evaluation of ability to deal with routine managerial tasks of the school, and the principal's score on equalitarianism. We also had hypothesized that nights spent on school affairs would be positively related to CS; however, the findings suggest that a curvilinear relationship exists between these two variables.

Appendix A. Research Instruments

The multiple objectives of the National Principalship Study required the collection of a large body of data from the three types of school personnel who participated in it: principals, teachers, and higher administrators. The research instruments used in the Study numbered 192 pages. The instruments used to obtain data on the job history and personal and social background of the principals and their self-evaluations were presented in Appendix A of Final Report No. 1 of Cooperative Research Project No. 853. We present below the instruments used to obtain measures of the two major dependent variables examined in the present study (IJS and CS): Enjoyment of Work Activities (A-1) and Satisfaction with Conditions of Work and Career (A-2).

A-1: Enjoyment of Work Activities Instrument

PSP

Instructions

The role of the PRINCIPAL is a varied one, involving many different tasks and calling for the application of many different skills. Most principals find that they enjoy these different aspects of their role to varying degrees.

Please answer the question to the right for each of the aspects of the principal's role given below. In answering this question, circle the one code letter which best represents your answer.

Question 25

To what degree do you enjoy each of the following aspects of a principal's role?

I enjoy. . .

A = A great deal
B = Very much
C = Somewhat
D = Very little
E = Not at all
N = Aspect not relevant in my particular situation

Aspects of a Principal's Role						
1. Handling administrative routine.	A	B	C	D	E	N
2. Supervising the instructional program.	A	B	C	D	E	N
3. Allocating the school budget.	A	B	C	D	E	N
4. Talking with individual parents about a problem concerning their child.	A	B	C	D	E	N
5. Serving on committees with parents.	A	B	C	D	E	N
6. Talking with a group of parents about a school problem.	A	B	C	D	E	N
7. Working primarily with teachers, rather than with pupils.	A	B	C	D	E	N
8. Working with "exceptionally able" teachers.	A	B	C	D	E	N
9. Working with "average" teachers.	A	B	C	D	E	N
10. Working with new teachers.	A	B	C	D	E	N
11. Working with youngsters who are having a hard time adjusting to a school situation.	A	B	C	D	E	N
12. Having a vacation from work periodically during the school year.	A	B	C	D	E	N
13. Conducting teachers' meetings.	A	B	C	D	E	N
14. Evaluating teacher performance.	A	B	C	D	E	N
15. Having the freedom to schedule one's own time.	A	B	C	D	E	N
16. Working with community agencies.	A	B	C	D	E	N

Please continue answering Question 25.

Question 25

To what degree do you enjoy each of the following aspects of a principal's role?

I enjoy. . .

A = A great deal
B = Very much
C = Somewhat
D = Very little
E = Not at all
N = Aspect not relevant in my particular situation

17. Handling public relations.	A	B	C	D	E	N
18. Supervising custodial personnel.	A	B	C	D	E	N
19. Supervising office personnel.	A	B	C	D	E	N
20. Supervising large groups of students.	A	B	C	D	E	N
21. Having to reprimand teachers.	A	B	C	D	E	N
22. Having to discipline pupils.	A	B	C	D	E	N
23. Preparing staff bulletins or announcements.	A	B	C	D	E	N
24. Working with guidance personnel.	A	B	C	D	E	N
25. Working with curriculum specialists.	A	B	C	D	E	N
26. Preparing reports to the higher administration.	A	B	C	D	E	N

- -

A-2: Satisfaction with Conditions of Work and Career Instrument

Instructions

Please answer the question to the right for each of the items found below. In answering this question, circle the one code letter which best represents your answer.

Question 26

How do you feel about the following items?

I feel. . . with. . .

A = Very satisfied
B = Moderately satisfied
C = Slightly satisfied
D = Slightly dissatisfied
E = Moderately dissatisfied
F = Very dissatisfied

	Items						
1.	The current state of the principalship as a "profession."	A	B	C	D	E	F
2.	The top salary nowadays available for principals.	A	B	C	D	E	F
3.	My chances for receiving salary increases as a principal.	A	B	C	D	E	F
4.	The amount of progress which I have made in my professional career.	A	B	C	D	E	F
5.	The amount of recognition which principals are given by society for their efforts and contributions.	A	B	C	D	E	F
6.	The capabilities of most of the people who are currently in the principalship.	A	B	C	D	E	F
7.	The capabilities of most of the people who are currently entering the principalship.	A	B	C	D	E	F
8.	The effect of a principal's job upon his family life.	A	B	C	D	E	F
9.	The effect of a principal's job upon his social life.	A	B	C	D	E	F
10.	The possibilities for a principal advancing to a position of greater responsibility.	A	B	C	D	E	F
11.	The amount of recognition which principals are given by members of other professions.	A	B	C	D	E	F
12.	The opportunity which the principalship provides for making the best use of my particular talents.	A	B	C	D	E	F

Please continue answering Question 26.

Question 26

How do you feel about the following items?

I feel. . . with. . .

A = Very satisfied
B = Moderately satisfied
C = Slightly satisfied
D = Slightly dissatisfied
E = Moderately dissatisfied
F = Very dissatisfied

13.	The level of professional standards maintained by most principals.	A	B	C	D	E	F
14.	The opportunity which principals have for associating with other professional people.	A	B	C	D	E	F
15.	The amount of recognition which non-educators give to principals as compared to what they give to other professionals.	A	B	C	D	E	F
16.	The amount of time for leisure activities which the principalship affords.	A	B	C	D	E	F
17.	My decision to become an educator rather than something else which I may have originally considered.	A	B	C	D	E	F
18.	The current requirements which must be met before one can originally be certified as a principal.	A	B	C	D	E	F
19.	The current requirements which must be met before one can continue to be certified as a principal.	A	B	C	D	E	F
20.	The amount of clerical help which is available to me in my present position.	A	B	C	D	E	F
21.	The "fringe benefits" which principals in this school system now receive.	A	B	C	D	E	F
22.	The amount of space provided for my official use in this school.	A	B	C	D	E	F
23.	The level of competence of most of the other principals in this school system.	A	B	C	D	E	F
24.	The present method employed in this school system for making decisions on curriculum matters.	A	B	C	D	E	F

Please continue answering Question 26.	Question 26 How do you feel about the following items? I feel. . . with. . . A = Very satisfied B = Moderately satisfied C = Slightly satisfied D = Slightly dissatisfied E = Moderately dissatisfied F = Very dissatisfied
25. The present method employed in this school system for making decisions on teacher discipline matters.	A B C D E F
26. The attitude of the teachers in this school toward the administrative personnel.	A B C D E F
27. The manner in which the principals and the higher administration work together in this school system.	A B C D E F
28. The cooperation and help which I receive from my superiors.	A B C D E F
29. The educational philosophy which seems to prevail in this school system.	A B C D E F
30. The evaluation process which my superiors use to judge my effectiveness as a principal.	A B C D E F
31. The cooperation which I receive from the parents of the children in this school.	A B C D E F
32. The level of competence of my superiors.	A B C D E F
33. The adequacy of the supplies available for me to use as principal of this school.	A B C D E F
34. The amount of custodial help which is available to me in this school.	A B C D E F
35. The amount of time made available by my superiors for my personal professional growth.	A B C D E F
36. The extent to which I am informed by my superiors about school matters affecting my school.	A B C D E F

Please continue answering Question 26.

Question 26

How do you feel about the following items?

I feel. . . with. . .

A = Very satisfied
B = Moderately satisfied
C = Slightly satisfied
D = Slightly dissatisfied
E = Moderately dissatisfied
F = Very dissatisfied

37. The teaching effectiveness of the faculty of this school.	A B C D E F
38. The extent to which the professional growth of principals is subsidized by this school system.	A B C D E F

Appendix B. Factor Weights and Guttman-type Scales Used in Measurement of Variables

We present in this appendix information concerning the measurement techniques used in the development of summary scores employed in the IJS and CS studies. With the exception of two variables, the summary scores were computed with factor analytic procedures. Table B-1 presents the results of the varimax rotation of the weights of the first three factors of the Principal Components Factor Analysis of the principals' responses to the 64 items in the Enjoyment of Work Activities and Satisfaction with Conditions of Work and Career Instruments. The summary score of IJS was developed from the "significant" loadings of Factor II in this table, in accord with Harmon's "shortened" method of factor scoring.[1] Tables B-2 through B-18 present the wording of the items, the means, standard deviations, and factor weights used to compute factor scores for the independent variables in the IJS and CS analyses, while Table B-19 presents similar information for the summary measure of Career Satisfaction. The correlation matrices which were factor analyzed and the details of the factor analysis, the varimax rotations, and the computation of factor score coefficients are not presented here in order to keep this appendix within reasonable limits and in view of the highly technical nature of these research activities. Readers who have a special interest in the more technical aspects of the factor analyses are encouraged to correspond with the authors.

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[1] Harry H. Harmon, Modern Factor Analysis (Chicago: University of Chicago Press, 1960), Chapter 16.

Tables B-20 and B-21 deal with the computation of two summary scores that were based on Guttman-type scales. The development of each scale was carried out through the five following steps. In Step 1, the subset of items from the Satisfaction with Conditions of Work and Career Instrument thought to be most relevant to each concept was identified and its items ranked on an *a priori* basis in order of their assumed relevance to the concept.

In Step 2, a 50 per cent random sub-sample of principals was drawn, and the item analysis procedure proposed by Stouffer *et al.*[2] was applied to that sub-sample in order to assess the potential scalability of each item. One or two low priority items originally thought to measure each concept had to be eliminated at this point because of their inability to meet the Stouffer criteria. The selected items, their optimum definitions of a positive response, and the associated positive marginals are presented in the "scaling sub-sample" column of Tables B-20 and B-21.

In Step 3, still using only the 50 per cent scaling sub-sample, the items meeting the Stouffer criteria were scaled and the subjects scored by means of a computerized version of Stone's modification[3] of Ford's[4] rapid scaling procedure. The observed and expected (i.e., "chance") coefficients of reproducibility resulting from this process are also presented in Tables B-20 and B-21.

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[2] Samuel A. Stouffer, *et al.*, "A Technique for Improving Cumulative Scales," *Public Opinion Quarterly*, 16 (1952), pp. 273-291.

[3] Carol L. Stone, "A Machine Method for Scaling as Many as Twelve Dichotomies," *Washington Agricultural Experiment Station Circular 329* (Pullman: Institute of Agricultural Sciences, State College of Washington, 1958), pp. 1-15.

[4] Robert N. Ford, "A Rapid Scoring Procedure for Attitude Questions," *Public Opinion Quarterly*, 14 (1950), pp. 507-532.

Step 4 was designed to protect against capitalization on random fluctuations possible with application of the Stouffer item analysis procedure prior to scaling. Using the same items and definitions of a positive response developed through the item analysis of the scaling sub-sample, the data from the remaining 50 per cent of the data cases were also scaled and scored. These results are presented in the column entitled "replication sub-sample" in Tables B-20 and B-21. For the two scales the results from the replication sub-sample are highly consistent with those obtained from the scaling sub-sample. Step 5 provided a check against random fluctuations in the response patterns as an explanation of the scaling results. We computed Chilton's[5] test of significance of the difference between observed and expected coefficients of reproducibility for the replication sub-sample. The resulting z-statistic was found to be statistically significant for both scales.[6]

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[5] Roland J. Chilton, "Computer Generated Data and the Statistical Significance of Scalogram," Sociometry, 29 (June, 1966), pp. 175-181.

[6] We are indebted to Robert E. Herriott for suggesting the procedures we used in developing the Guttman-type scales.

Table B-1. Varimax Loadings Resulting from Rotation of the First Three Factors in the Principal Components Factor Analysis of All 64 Items in the Enjoyment of Work Activities Instrument and the Satisfaction with Conditions of Work and Career Instrument

Instrument[a] and Item			Factor Weights[b]		
			I	II	III
EWA	1.	Handling administrative routine.	.18	.12	.17
EWA	2.	Supervising the instructional program.	.05	.44*	.08
EWA	3.	Allocating the school budget.	.08	.14	.02
EWA	4.	Talking with individual parents about a problem concerning their child.	.14	.57*	.01
EWA	5.	Serving on committees with parents.	.07	.48*	.01
EWA	6.	Talking with a group of parents about a school problem.	-.01	.59*	.04
EWA	7.	Working primarily with teachers, rather than with pupils.	.00	.31*	.15
EWA	8.	Working with "exceptionally able" teachers.	-.01	.41*	.01
EWA	9.	Working with "average" teachers.	.14	.43*	.08
EWA	10.	Working with new teachers.	.09	.46*	.09
EWA	11.	Working with youngsters who are having a hard time adjusting to a school situation.	.17	.48*	.01

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[a] EWA refers to the Enjoyment of Work Activities Instrument and SCWC refers to the Satisfaction with Conditions of Work and Career Instrument (see Appendix A). Also see Appendix A for the response categories for these two instruments.

[b] Weights marked with an asterisk meet the following two criteria: (1) the absolute value of its loading on the factor in question was greater than or equal to .30; and (2) the absolute value of its loading was at least .15 greater than its loading on any other factor.

Table B-1 (continued)

Instrument[a] and Item			Factor Weights[b]		
			I	II	III
EWA	12.	Having a vacation from work periodically during the school year.	-.07	.24	.01
EWA	13.	Conducting teachers' meetings.	-.03	.52*	.17
EWA	14.	Evaluating teacher performance.	-.02	.49*	.10
EWA	15.	Having the freedom to schedule one's own time.	-.00	.34*	-.04
EWA	16.	Working with community agencies.	-.04	.47*	.07
EWA	17.	Handling public relations.	-.02	.50*	.07
EWA	18.	Supervising custodial personnel.	.08	.30*	.07
EWA	19.	Supervising office personnel.	.19	.39*	.00
EWA	20.	Supervising large groups of students.	.05	.48*	.04
EWA	21.	Having to reprimand teachers.	.00	.08	.11
EWA	22.	Having to discipline pupils.	.03	.13	.10
EWA	23.	Preparing staff bulletins or announcements.	.00	.34*	.09
EWA	24.	Working with guidance personnel.	.15	.41*	-.03

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[a] EWA refers to the Enjoyment of Work Activities Instrument and SCWC refers to the Satisfaction with Conditions of Work and Career Instrument (see Appendix A). Also see Appendix A for the response categories for these two instruments.

[b] Weights marked with an asterisk meet the following two criteria: (1) the absolute value of its loading on the factor in question was greater than or equal to .30; and (2) the absolute value of its loading was at least .15 greater than its loading on any other factor.

Table B-1 (continued)

Instrument[a] and Item			Factor Weights[b]		
			I	II	III
EWA	25.	Working with curriculum specialists.	.16	.53*	.00
EWA	26.	Preparing reports to the higher administration.	.21	.29	.20
SCWC	1.	The current state of the principalship as a "profession."	.41	- .04	.52
SCWC	2.	The top salary nowadays available for principals.	.37	- .18	.53*
SCWC	3.	My chances for receiving salary increases as a principal.	.43	- .09	.46
SCWC	4.	The amount of progress which I have made in my professional career.	.29	.06	.36
SCWC	5.	The amount of recognition which principals are given by society for their efforts and contributions.	.29	- .03	.71*
SCWC	6.	The capabilities of most of the people who are currently in the principalship.	.24	.13	.49*
SCWC	7.	The capabilities of most of the people who are currently entering the principalship.	.21	.14	.54*

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[a] EWA refers to the Enjoyment of Work Activities Instrument and SCWC refers to the Satisfaction with Conditions of Work and Career Instrument (see Appendix A). Also see Appendix A for the response categories for these two instruments.

[b] Weights marked with an asterisk meet the following two criteria: (1) the absolute value of its loading on the factor in question was greater than or equal to .30; and (2) the absolute value of its loading was at least .15 greater than its loading on any other factor.

Table B-1 (continued)

Instrument[a] and Item			Factor Weights[b] I	II	III
SCWC	8.	The effect of a principal's job upon his family life.	.18	.14	.50*
SCWC	9.	The effect of a principal's job upon his social life.	.11	.15	.55*
SCWC	10.	The possibilities for a principal advancing to a position of greater responsibility.	.41	- .07	.46
SCWC	11.	The amount of recognition which principals are given by members of other professions.	.22	- .02	.75*
SCWC	12.	The opportunity which the principalship provides for making the best use of my particular talents.	.27	.13	.46*
SCWC	13.	The level of professional standards maintained by most principals.	.28	.20	.46*
SCWC	14.	The opportunity which principals have for associating with other professional people.	.17	.09	.63*
SCWC	15.	The amount of recognition which non-educators give to principals as compared to what they give to other professionals.	.17	- .03	.73*

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[a] EWA refers to the Enjoyment of Work Activities Instrument and SCWC refers to the Satisfaction with Conditions of Work and Career Instrument (see Appendix A). Also see Appendix A for the response categories for these two instruments.

[b] Weights marked with an asterisk meet the following two criteria: (1) the absolute value of its loading on the factor in question was greater than or equal to .30; and (2) the absolute value of its loading was at least .15 greater than its loading on any other factor.

Table B-1 (continued)

Instrument[a] and Item			Factor Weights[b] I	II	III
SCWC	16.	The amount of time for leisure activities which the principalship affords.	.12	.07	.50*
SCWC	17.	My decision to become an educator rather than something else which I may have originally considered.	.18	.14	.30
SCWC	18.	The current requirements which must be met before one can originally be certified as a principal.	.16	.19	.48*
SCWC	19.	The current requirements which must be met before one can continue to be certified as a principal.	.13	.21	.49*
SCWC	20.	The amount of clerical help which is available to me in my present position.	.37	-.05	.30
SCWC	21.	The "fringe benefits" which principals in this school system now receive.	.36	-.02	.42
SCWC	22.	The amount of space provided for my official use in this school.	.33*	-.01	.15
SCWC	23.	The level of competence of most of the other principals in this school system.	.35	.12	.42

[a] EWA refers to the Enjoyment of Work Activities Instrument and SCWC refers to the Satisfaction with Conditions of Work and Career Instrument (see Appendix A). Also see Appendix A for the response categories for these two instruments.

[b] Weights marked with an asterisk meet the following two criteria: (1) the absolute value of its loading on the factor in question was greater than or equal to .30; and (2) the absolute value of its loading was at least .15 greater than its loading on any other factor.

Table B-1 (continued)

Instrument[a] and Item			Factor Weights[b]		
			I	II	III
SCWC	24.	The present method employed in this school system for making decisions on curriculum matters.	.67*	.14	.21
SCWC	25.	The present method employed in this school system for making decisions on teacher discipline matters.	.65*	.14	.25
SCWC	26.	The attitude of the teachers in this school toward the administrative personnel.	.49*	.18	.15
SCWC	27.	The manner in which the principals and the higher administration work togeth in this school system.	.79*	.11	.16
SCWC	28.	The cooperation and help which I receive from my superiors.	.81*	.11	.16
SCWC	29.	The educational philosophy which seems to prevail in this school system.	.70*	.16	.17
SCWC	30.	The evaluation process which my superiors use to judge my effectiveness as a principal.	.81*	.06	.18
SCWC	31.	The cooperation which I receive from the parents of the children in this school.	.70*	.15	.18

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[a] EWA refers to the Enjoyment of Work Activities Instrument and SCWC refers to the Satisfaction with Conditions of Work and Career Instrument (see Appendix A). Also see Appendix A for the response categories for these two instruments.

[b] Weights marked with an asterisk meet the following two criteria: (1) the absolute value of its loading on the factor in question was greater than or equal to .30; and (2) the absolute value of its loading was at least .15 greater than its loading on any other factor.

Table B-1 (continued)

Instrument[a] and Item			Factor Weights[b] I	II	III
SCWC	32.	The level of competence of my superiors.	.61*	.12	.20
SCWC	33.	The adequacy of the supplies available for me to use as principal of this school.	.30	- .01	.17
SCWC	34.	The amount of custodial help which is available to me in this school.	.38*	.06	.14
SCWC	35.	The amount of time made available by my superiors for my personal professional growth.	.58*	.06	.30
SCWC	36.	The extent to which I am informed by my superiors about school matters affecting my school.	.68*	.18	.13
SCWC	37.	The teaching effectiveness of the faculty of this school.	.41*	.07	.19
SCWC	38.	The extent to which the professional growth of principals is subsidized by this school system.	.50*	- .05	.27

[a] EWA refers to the Enjoyment of Work Activities Instrument and SCWC refers to the Satisfaction with Conditions of Work and Career Instrument (see Appendix A). Also see Appendix A for the response categories for these two instruments.

[b] Weights marked with an asterisk meet the following two criteria: (1) the absolute value of its loading on the factor in question was greater than or equal to .30; and (2) the absolute value of its loading was at least .15 greater than its loading on any other factor.

Table B-2. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of the Autonomy Given Them by the Higher Administration

Item*	Mean	Standard Deviation	Factor Weight
To what extent [(1) always, (2) almost always, (3) occasionally, (4) almost never, (5) never] does the higher administration in your school system:			
1. Give a principal complete freedom to coordinate the instruction in the same subject at a given grade level.	2.15	0.97	-0.69
2. Accept a principal's judgment as to whether the program of one grade prepares students adequately for the next grade.	2.31	1.00	-0.68
3. Permit a principal to determine the educational objectives for his school.	2.38	0.96	-0.67
4. Permit a principal to use his own basis for judging how good a job his school is doing.	2.61	0.99	-0.65
5. Let a principal allocate his time as he sees fit.	1.90	0.83	-0.51
6. Allow a principal to make his own decisions as to what information he should pass on to staff members.	1.32	0.88	-0.46
7. Encourage a principal to refer parents with major complaints to the higher administration.	3.23	1.11	-0.36
8. Allow a principal to decide whether to introduce major changes, desired by the higher administration, into the curriculum of his school.	3.27	1.11	-0.36

* Items ordered according to decreasing magnitude of factor weight.

Table B-3. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of the Adequacy of the Higher Administration's Decision-Making

Item*	Mean	Standard Deviation	Factor Weight
When you have problems that formally require a decision by the higher administration, how frequently [(1) always, (2) almost always, (3) occasionally, (4) almost never, (5) never]:			
1. Do you feel discouraged about trying to get further decisions from the higher administration.	3.90	0.83	0.79
2. Do you feel that the decision only confuses matters.	4.03	0.75	0.74
3. Do you feel the decision is based upon rules and regulations that you had never been aware of before.	4.07	0.69	0.67
4. Are you able to move right ahead in solving your problems after receiving the decision.	1.79	0.57	-0.61
5. Do you get a decision in time to deal with the problem most effectively.	2.00	0.65	-0.60
6. Are you uncertain about whom you should deal with.	3.97	0.89	0.59
7. Do you find it difficult to contact the person who must make the decision.	3.74	0.85	0.56
8. Is the decision directly pertinent to your problem.	1.83	0.60	0.56

* Items ordered according to decreasing magnitude of factor weight.

Table B-4. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of the Adequacy of Communications from Their Immediate Administrative Superior

Item*	Mean	Standard Deviation	Factor Weight
To what extent [(1) always, (2) almost always, (3) occasionally, (4) almost never, (5) never] does your immediate administrative superior:			
1. Provide principals with information they need to make important decisions.	1.68	0.73	-0.78
2. Present the views of the higher school administration to principals in an accurate manner.	1.40	0.64	-0.78
3. Express his ideas clearly.	1.55	0.64	-0.74
4. Explain the reasons behind important decisions he makes.	1.67	0.72	-0.74
5. Present the views of principals to his superiors in an accurate manner.	1.49	0.70	-0.74
6. Engage in "double-talk."	4.45	0.87	0.68
7. Prepare memoranda to principals that are confusing.	4.34	0.81	0.65

* Items ordered according to decreasing magnitude of factor weight.

Table B-5. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of the Adequacy of Communications from Their Superintendent of Schools

Item*	Mean	Standard Deviation	Factor Weight
To what extent [(1) always, (2) almost always, (3) occasionally, (4) almost never, (5) never] does your superintendent of schools:			
1. Provide principals with information they need to make important decisions.	1.75	0.82	-0.78
2. Present the views of principals to his superiors in an accurate manner.	1.50	0.73	-0.73
3. Express his ideas clearly.	1.45	0.62	-0.73
4. Explain the reasons behind important decisions he makes.	1.74	0.80	-0.72
5. Engage in "double-talk."	4.48	0.84	0.72
6. Present the views of the higher school administration to principals in an accurate manner.	1.36	0.65	-0.70
7. Prepare memoranda to principals that are confusing.	4.40	0.79	0.60

* Items ordered according to decreasing magnitude of factor weight.

Table B-6. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of the Stimulation Received from Their Immediate Administrative Superior

Item*	Mean	Standard Deviation	Factor Weight
To what extent [(1) always, (2) almost always, (3) occasionally, (4) almost never, (5) never] does your immediate administrative superior:			
1. Have constructive suggestions to offer principals in dealing with their major problems.	1.71	0.83	-0.81
2. Help principals to understand the sources of important problems they are facing.	1.82	0.89	-0.78
3. Help to eliminate weaknesses in the schools under his jurisdiction.	1.53	0.71	-0.75
4. Display a strong interest in improving the quality of the educational program.	1.29	0.62	-0.73
5. Utilize research evidence when considering solutions to educational problems.	1.79	0.77	-0.69
6. Clarify school system policies as they apply to a principal's work.	1.55	0.66	-0.66
7. Encourage principals to maximize the different skills to be found in his faculty.	1.67	0.94	-0.64
8. Bring to the attention of principals educational literature that is of value to them in their jobs.	1.93	1.00	-0.61
9. Discourage principals who want to try out new educational ideas.	4.17	0.91	0.42
10. Reprimand principals whose educational ideas disagree with his own.	4.08	0.98	0.34

* Items ordered according to decreasing magnitude of factor weight.

Table B-7. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of the Stimulation Received from Their Superintendent of Schools

Item*	Mean	Standard Deviation	Factor Weight
To what extent [(1) always, (2) almost always, (3) occasionally, (4) almost never, (5) never] does your superintendent of schools:			
1. Help principals to understand the sources of important problems they are facing.	1.90	0.95	-0.78
2. Have constructive suggestions to offer principals in dealing with their major problems.	1.91	0.99	-0.77
3. Help to eliminate weaknesses in the schools under his jurisdiction.	4.12	0.94	-0.77
4. Display a strong interest in improving the quality of the educational program.	1.31	0.66	-0.74
5. Utilize research evidence when considering solutions to educational problems.	1.62	0.69	-0.67
6. Bring to the attention of principals educational literature that is of value to them in their jobs.	2.20	1.13	-0.66
7. Clarify school system policies as they apply to a principal's work.	1.50	0.63	-0.60
8. Encourage principals to maximize the different skills to be found in his faculty.	1.72	0.99	-0.60
9. Reprimand principals whose educational ideas disagree with his own.	4.12	0.94	0.33
10. Discourage principals who want to try out new educational ideas.	4.22	0.91	0.31

* Items ordered according to decreasing magnitude of factor weight.

Table B-8. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of the Social-Emotional Support Received from Their Immediate Administrative Superior

Item*	Mean	Standard Deviation	Factor Weight
To what extent [(1) always, (2) almost always, (3) occasionally, (4) almost never, (5) never] does your superintendent of schools:			
1. Develop a "we-feeling" in working with others.	1.71	0.85	-0.81
2. Put you at ease when you talk with him.	1.40	0.71	-0.77
3. Develop a real interest in your welfare.	1.75	0.88	-0.76
4. Make those who work with him feel inferior to him.	1.62	0.76	0.75
5. Know the right way to handle delicate interpersonal situations.	1.73	0.82	-0.75
6. Go out of his way to be nice to others.	1.80	0.74	-0.74
7. Display a good sense of humor.	4.50	0.79	-0.74
8. Rub people the wrong way.	4.39	0.90	0.73
9. Support principals who are unfairly criticized.	1.38	0.62	-0.70
10. Show pettiness in his behavior.	4.01	0.91	0.62
11. Encourage you to see him on any school matter you may wish to discuss with him.	1.50	0.80	-0.61

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Table B-8. (continued)

Item*	Mean	Standard Deviation	Factor Weight
12. Can be trusted to withhold confidential information.	4.30	0.94	-0.57
13. Get easily upset over trivial matters.	1.26	0.59	0.54

* Items ordered according to decreasing magnitude of factor weight.

Table B-9. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of the Social-Emotional Support They Receive from Their Superintendent of Schools

Item*	Mean	Standard Deviation	Factor Weight
To what extent [(1) always, (2) almost always, (3) occasionally, (4) almost never, (5) never] does your superintendent of schools:			
1. Develop a "we-feeling" in working with others.	1.74	0.93	-0.81
2. Put you at ease when you talk with him.	1.53	0.91	-0.78
3. Develop a real interest in your welfare.	1.82	0.96	-0.76
4. Make those who work with him feel inferior to him.	4.37	0.95	0.76
5. Know the right way to handle delicate interpersonal situations.	1.69	0.77	-0.75
6. Go out of his way to be nice to others.	1.66	0.78	-0.74
7. Display a good sense of humor.	1.65	0.81	-0.70
8. Rub people the wrong way.	4.09	0.94	0.68
9. Support principals who are unfairly criticized.	1.39	0.65	-0.67
10. Show pettiness in his behavior.	4.63	0.69	0.66
11. Encourage you to see him on any school matter you may wish to discuss with him.	1.97	1.27	-0.58

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Table B-9. (continued)

Item*	Mean	Standard Deviation	Factor Weight
12. Can be trusted to withhold confidential information.	1.18	0.50	-0.41
13. Get easily upset over trivial matters.	4.46	0.85	0.41

* Items ordered according to decreasing magnitude of factor weight.

Table B-10. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of the Routine Administrative Support Received from Their Immediate Administrative Superiors

Item*	Mean	Standard Deviation	Factor Weight
To what extent [(1) always, (2) almost always, (3) occasionally, (4) almost never, (5) never] does your immediate administrative superior:			
1. Make your life difficult because of his administrative ineptitude.	4.45	0.87	0.77
2. Keep his office running smoothly.	1.44	0.65	-0.75
3. Handle paper work associated with his job efficiently.	1.47	0.67	-0.74
4. Upset your work through his poor planning.	4.48	0.82	0.73
5. Cut through "red tape" when fast action is needed.	1.95	0.93	-0.65
6. Clarify school system policies as they apply to a principal's work.	1.54	0.74	-0.65
7. Run meetings and conferences in a disorganized fashion.	4.45	0.87	0.63
8. Require principals to engage in unnecessary paper work.	3.78	0.95	0.58
9. Do everything he can to minimize the problems you face in opening the school.	1.79	1.06	-0.56
10. Show poor business sense in financial matters.	4.44	0.86	0.48

* Items ordered according to decreasing magnitude of factor weight.

Table B-11. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of the Routine Administrative Support Received from Their Superintendent of Schools

Item*	Mean	Standard Deviation	Factor Weight
To what extent [(1) always, (2) almost always, (3) occasionally, (4) almost never, (5) never] does your superintendent of schools:			
1. Make your life difficult because of his administrative ineptitude.	4.71	0.61	0.73
2. Upset your work through his poor planning.	4.57	0.73	0.72
3. Clarify school system policies as they apply to a principal's work.	1.68	0.88	-0.68
4. Handle paper work associated with his job efficiently.	1.36	0.58	-0.67
5. Keep his office running smoothly.	1.34	0.52	-0.65
6. Cut through "red tape" when fast action is needed.	1.78	0.85	-0.64
7. Require principals to engage in unnecessary paper work.	3.81	0.91	0.56
8. Do everything he can to minimize the problems you face in opening the school.	1.81	1.06	-0.56
9. Run meetings and conferences in a disorganized fashion.	4.54	0.83	0.52
10. Show poor business sense in financial matters.	4.53	0.83	0.43

* Items ordered according to decreasing magnitude of factor weight.

Table B-12. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of the Importance Attributed to the Principals' Work by Their Immediate Administrative Superior

Item*	Mean	Standard Deviation	Factor Weight
To what extent [(1) always, (2) almost always, (3) occasionally, (4) almost never, (5) never] does your immediate administrative superior:			
1. Give principals the feeling that they can make significant contributions to improving the classroom performance of teachers.	1.43	0.77	-0.83
2. Get principals to upgrade the performance standards of their school.	1.50	0.82	-0.79
3. Give principals the feeling that their work is an "important" activity.	1.29	0.63	-0.63
4. Have constructive suggestions to offer principals in dealing with their major problems.	1.30	0.60	-0.77
5. Take a strong interest in your professional development.	1.83	1.02	-0.76
6. Make principals' meetings a valuable educational activity.	1.83	0.82	-0.71

* Items ordered according to decreasing magnitude of factor weight.

Table B-13. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of the Importance Attributed to the Principals' Work by Their Superintendent of Schools

Item*	Mean	Standard Deviation	Factor Weight
To what extent [(1) always, (2) almost always, (3) occasionally, (4) almost never, (5) never] does your superintendent of schools:			
1. Give principals the feeling that they can make significant contributions to improving the classroom performance of teachers.	1.51	0.84	-0.85
2. Treat principals as professional workers.	1.31	0.65	-0.79
3. Give principals the feeling that their work is an "important" activity.	1.41	0.77	-0.78
4. Get principals to upgrade the performance standards of their school.	1.62	0.92	-0.77
5. Take a strong interest in your professional development.	2.01	1.20	-0.76
6. Make principals' meetings a valuable educational activity.	1.93	0.93	-0.74

* Items ordered according to decreasing magnitude of factor weight.

Table B-14. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of Self-assessment of Educational Leadership

Item*	Mean	Standard Deviation	Factor Weight
How would you rate [outstanding (6), excellent (5), good (4), fair (3), poor (2), very poor (1)] your performance in:			
1. Getting experienced teachers to upgrade their performance.	3.90	0.83	0.65
2. Improving the performance of inexperienced teachers.	4.21	0.79	0.62
3. Getting teachers to use new educational methods.	4.04	0.74	0.61
4. Giving leadership to the instructional program.	4.26	0.80	0.59
5. Communicating the objectives of the school program to the faculty.	4.44	0.77	0.57
6. Getting teachers to coordinate their activities.	4.22	0.71	0.56
7. Knowing about the strengths and weaknesses of teachers.	4.64	0.77	0.55
8. Maximizing the different skills found in a faculty.	4.41	0.81	0.54

*Items ordered according to decreasing magnitude of factor weight.

Table B-15. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of Self-assessment in Dealing with Routine Managerial Tasks

Item*	Mean	Standard Deviation	Factor Weight
How would you rate [outstanding (6), excellent (5), good (4), fair (3), poor (2), very poor (1)] your performance in:			
1. Keeping the school office running smoothly.	4.52	0.78	0.67
2. General planning for the school.	4.63	0.74	0.61
3. Directing the work of administrative assistants.	4.46	0.79	0.47
4. Cutting "red-tape" when fast action is needed.	4.77	0.85	0.40
5. Publicizing the work of the school.	4.03	0.93	0.38

*Items ordered according to decreasing magnitude of factor weight.

Table B-16. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of Self-assessment of Human Relations Skills

Item*	Mean	Standard Deviation	Factor Weight
How would you rate [outstanding (6), excellent (5), good (4), fair (3), poor (2), very poor (1)] your performance in:			
1. Resolving student discipline problems.	2.33	0.72	-0.61
2. Handling parental complaints.	2.33	0.72	-0.60
3. Handling delicate interpersonal situations.	2.54	0.80	-0.53
4. Obtaining parental cooperation with the school.	2.29	0.80	-0.53
5. Developing "esprit de corps" among teachers.	2.26	0.80	-0.50

*Items ordered according to decreasing magnitude of factor weight.

Table B-17. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of their Value Orientation on Equalitarianism

Item*	Mean	Standard Deviation	Factor Weight
How strongly [strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (5), agree (6) strongly agree (7)] do you agree or disagree with the statement that:			
1. There should be equality for everyone -- because we are all human beings.	4.75	1.80	0.53
2. Everyone should have an equal chance and an equal say.	4.90	1.81	0.43
3. A group cannot get its job done without voluntary cooperation from everyone.	4.21	1.83	0.39
4. A group of equals will work a lot better than a group with a rigid hierarchy.	4.98	1.68	0.26

*Items ordered according to decreasing magnitude of factor weight. In the case of the Value Profile, all principals who did not respond to a given question were assigned a response of (4). This method of scoring follows the procedure used by Bales and Couch; it also accounts for the fact that the N equals 382 on every item and for the absence of a (4) on the list of response alternatives and their weights shown above.

Table B-18. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of their Value Orientation on Acceptance of Authority

Item*	Mean	Standard Deviation	Factor Weight
How strongly [strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (5), agree (6), strongly agree (7)] do you agree or disagree with the statement that:			
1. Obedience and respect for authority are the most important virtues children should learn.	4.37	1.88	0.67
2. What youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.	3.74	1.73	0.60
3. Patriotism and loyalty are the first and most important requirements of a good citizen.	4.56	1.70	0.57
4. You have to respect authority, and when you stop respecting authority, your situation isn't worth much.	5.04	1.53	0.54
5. There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.	4.23	1.88	0.54
6. Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.	4.24	1.72	0.54

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*Items ordered according to decreasing magnitude of factor weight. In the case of the Value Profile, all principals who did not respond to a given question were assigned a response of (4). This method of scoring follows the procedure used by Bales and Couch; it also accounts for the fact that the N equals 382 on every item and for the absence of a (4) on the list of response alternatives and their weights shown above.

Table B-18 (continued)

Item*	Mean	Standard Deviation	Factor Weight
7. The most important qualities of a real man are determination and driving ambition.	2.85	1.55	0.49
8. No sane, normal, decent person could ever think of hurting a close friend or relative.	3.69	1.81	0.46
9. Our modern industrial and scientific developments are signs of a greater degree of success than that attained by any previous society.	4.28	1.79	0.43
10. When we live in the proper way -- stay in harmony with the forces of nature, and keep all that we have in good condition -- then all will go well in the world.	3.61	1.73	0.40

*Items ordered according to decreasing magnitude of factor weight. In the case of the Value Profile, all principals who did not respond to a given question were assigned a response of (4). This method of scoring follows the procedure used by Bales and Couch; it also accounts for the fact that the N equals 382 on every item and for the absence of a (4) on the list of response alternatives and their weights shown above.

Table B-19. Item Means, Standard Deviations, and Factor Weights Applied to the Responses of the 382 Principals Used to Compute Summary Scores of Their Career Satisfaction

Item*	Mean	Standard Deviation	Factor Weight
How do you feel [very satisfied (6), moderately satisfied (5), slightly satisfied (4), slightly dissatisfied (3), moderately dissatisfied (2), very dissatisfied (1)] about:			
1. The opportunity which the principalship provides for making best use of your particular talents.	5.19	0.86	0.79
2. Your decision to become an educator rather than something else which you have have originally considered.	5.50	0.75	0.74
3. The amount of progress you have made in your professional career.	5.04	0.99	0.73

*Items ordered according to decreasing magnitude of factor weight.

Table B-20. Technical Details of Scale Construction: Gratification with the Social Status of the Principalship

Number of Usable Cases = 499 Number of Items = 3

A. Operational Definition of Scale

		Per Cent Positive Marginal		
Item[a]	Definition of Positive Response[a]	Scaling Sub-sample	Replication Sub-sample	Total Sample
11	A, B, C	.750	.757	.754
15	A, B	.452	.490	.471
5	A	.169	.171	.170

B. Coefficients of Reproducibility

	Sub-sample	Replication Sub-sample	Total Sample
Observed Coefficient of Reproducibility (CR_o)	.993	.987	.990
Expected Coefficient of Reproducibility (CR_e)	.931	.931	.931
Number of Cases	248	251	499
Test of $CR_o - CR_e$ (z)	-	6.06*	-

[a] For wording of items and response alternatives, see Appendix A, A-2.

* Statistically significant at below .001 level.

Table B-20 (continued)

C. Distribution of Scale Scores for Total Sample

Ideal Response Pattern	Score	Frequency	Per Cent
+ + +	3	83	16.6
+ + -	2	159	31.9
+ - -	1	140	28.1
- - -	0	117	23.4

Table B-21. Technical Details of Scale Construction: Gratification with Income Rewards of the Principalship

Number of Usable Cases = 498 Number of Items = 2

A. Operational Definition of Scale

		Per Cent Positive Marginal		
Item[a]	Definition of Positive Response[a]	Scaling Sub-sample	Replication Sub-sample	Total Sample
3	A, B, C	.672	.641	.657
2	A, B	.453	.418	.438

B. Coefficients of Reproducibility

	Sub-sample	Replication Sub-sample	Total Sample
Observed Coefficient of Reproducibility (CR_o)	.986	.988	.987
Expected Coefficient of Reproducibility (CR_e)	.926	.925	.925
Number of Cases	247	251	498
Test of $CR_o - CR_e$ (z)	-	4.17*	-

C. Distribution of Scale Scores for Total Sample

Ideal Response Pattern	Score	Frequency	Per Cent
+ +	2	217	43.6
+ -	1	123	24.7
- -	0	158	31.7

[a] For wording of items and response alternatives, see Appendix A, A-2.

*Statistically significant at below .001 level.

Appendix C. Degree of Enjoyment Men Principals Derive from Different Aspects of Their Work

The degree of enjoyment the 382 men principals in the National Principalship Study reported they derive from 26 different aspects of their work is reported in Table C-1. To facilitate the interpretation of the data, each of the five response categories has been assigned a weight from 5 (a great deal of enjoyment) to 1 (no enjoyment), and a mean computed for each item. The items are presented in rank order with those aspects of their work which they enjoy the most appearing first and those which they enjoy least appearing last.

The data in Table C-1 reveal considerable variation in the degree of enjoyment they derive, on the average, from different aspects of their work. The two activities that principals least enjoy (items 22 and 21) involve sanctioning activities: the reprimanding of teachers and the disciplining of pupils. Among the five items with the lowest scores, the other three all deal with routine administrative activities: supervising custodial personnel, preparing reports for the higher administration, and preparing staff bulletins (items 18, 26, and 23). The aspects of their work they most enjoy involve working with two categories of teachers: those who are viewed as "exceptionally able" and those who are new to the school (items 8 and 10). The data also indicate that other aspects of their work from which they derive a great deal of enjoyment are having the freedom to schedule their own time and supervising the instructional program (items 15 and 2). Among the many observations that could be made as a result of comparing the ranks of different items five perhaps deserve special note. The first is that men principals, on the average, claim to derive greater enjoyment from supervising the instructional program (item 2) than from handling routine administrative affairs of the school (item 1). Second, they apparently obtain less gratification from working with "average" teachers (item 9) than with those who are "exceptionally able" (item 8). Third, contrary to much thinking, the majority of men principals derive considerable enjoyment from working with guidance personnel (item 24) and working with curriculum specialists (item 25). Fourth, evaluating teacher performance (item 14) is one of the less pleasurable parts of the work of most men principals: it ranked 21st among the 26 items as an enjoyable activity. Fifth, the majority of men principals apparently miss somewhat the closer contacts they had with students when they were teachers (item 7).

Table C-1. Percentage Distribution, Mean, Standard Deviation, and Rank According to Item Means of the 382 Men Principals' Responses to the 26 Items in the Enjoyment of Work Activities Instrument

The Question	The Response Choices and Weights	
To what degree do you enjoy each of the following aspects of a principal's role?	5 = A great deal 4 = Very much 3 = Somewhat 2 = Very little	1 = Not at all 0 = Aspect not relevant in my particular situation

Item[**]	Rank	Per Cent of Principals Responding 5	4	3	2	1	Mean	S.D.	N
8. Working with "exceptionally able" teachers.	1	51	39	10			4.41	0.67	380[*]
10. Working with new teachers.	2	47	42	11			4.37	0.67	379[*]
12. Having a vacation from work periodically during the school year.	3	46	35	16	2	1	4.24	0.82	368[*]
15. Having the freedom to schedule one's own time.	4	38	48	13	1		4.23	0.72	377[*]
2. Supervising the instructional program.	5	32	53	13	2		4.17	0.70	381[*]
24. Working with guidance personnel.	6.5	31	51	17	1		4.12	0.71	367[*]
4. Talking with individual parents about a problem concerning their child.	6.5	30	51	18	1		4.12	0.70	382

[*] Missing cases due to "0" choices.

[**] Items are numbered according to their position in the 26-item research instrument (see Appendix A-1).

Table C-1 (continued)

Item**	Rank	Per Cent of Principals Responding					Mean	S.D.	N
		5	4	3	2	1			
6. Talking with a group of parents about a school problem.	8	33	47	17	3		4.11	0.77	379*
11. Working with youngsters who are having a hard time adjusting to a school situation.	9	31	43	23	3		4.01	0.81	380*
9. Working with "average" teachers.	10	20	54	25	1		3.94	0.70	382
25. Working with curriculum specialists.	11	24	48	23	4	1	3.91	0.82	375*
17. Handling public relations.	12	30	35	28	6	1	3.89	0.92	377*
13. Conducting teachers' meetings.	13.5	16	49	30	5		3.74	0.80	382
1. Handling administrative routine.	13.5	25	33	34	7	1	3.74	0.95	381*
16. Working with community agencies.	15	20	39	34	7		3.72	0.87	380*
5. Serving on committees with parents.	16.5	17	41	32	9	1	3.65	0.88	368*
20. Supervising large groups of students.	16.5	17	40	34	8	1	3.65	0.90	373*
19. Supervising office personnel.	18	8	37	45	9	1	3.43	0.80	374*

*Missing cases due to "0" choices.

**Items are numbered according to their position in the 26-item research instrument (see Appendix A-1).

Table C-1 (continued)

		Per Cent of Principals Responding							
Item**	Rank	5	4	3	2	1	Mean	S.D.	N
7. Working primarily with teachers, rather than with pupils.	19	7	35	45	12	1	3.35	0.83	374*
3. Allocating the school budget.	20	9	28	45	16	2	3.26	0.89	296*
14. Evaluating teacher performance.	21	8	30	40	17	5	3.20	0.97	382
23. Preparing staff bulletins or announcements.	22	5	26	49	17	3	3.13	0.85	380*
18. Supervising custodial personnel.	23	5	20	48	23	4	2.99	0.89	338*
26. Preparing reports to the higher administration.	24	4	22	45	24	5	2.98	0.92	381*
22. Having to discipline pupils.	25	1	3	19	48	29	1.98	0.82	378*
21. Having to reprimand teachers.	26	1		5	37	57	1.50	0.68	378*

*Missing cases due to "0" choices.

**Items are numbered according to their position in the 26-item research instrument (see Appendix A-1).

Table C-2. Percentage Distribution, Mean, and Standard Deviation of the Responses of 382 Men Principals to the 26 Items in the Enjoyment of Work Activities Instrument by School Level

		Per Cent of Principals Responding They Enjoy Activity*									
Item		5	4	3	2	1	$\bar{X}$	S.D.	Chi Square	Degrees of Freedom	Sig. at Below .05 Level
1. Handling administrative routine.	E	17.5	29.9	43.3	6.2	3.1	3.53	0.96	7.86	6	No
	J	27.1	37.2	27.9	7.0	0.8	3.83	0.94			
	S	27.1	32.9	32.3	7.7		3.79	0.93			
2. Supervising the instructional program.	E	29.6	54.1	16.3			4.13	0.67	3.02	4	No
	J	37.5	51.6	8.6	2.3		4.24	0.71			
	S	30.3	54.2	13.5	1.9		4.13	0.71			
3. Allocating the school budget.	E	5.8	29.0	39.1	21.7	4.3	3.10	0.96	9.68	6	No
	J	13.1	24.3	49.5	12.1	0.9	3.36	0.89			
	S	6.7	31.7	44.2	16.7	0.8	3.27	0.85			
4. Talking with individual parents about a problem concerning their child.	E	32.7	52.0	15.3			4.17	0.67	6.44	4	No
	J	36.4	47.3	15.5	0.8		4.19	0.72			
	S	23.9	54.2	21.3	0.6		4.01	0.69			
5. Serving on committees with parents.	E	20.4	44.1	29.0	6.5		3.78	0.85	4.12	6	No
	J	15.4	40.7	31.7	12.2		3.59	0.89			
	S	15.1	40.8	35.5	7.2	1.3	3.61	0.88			
6. Talking with a group of parents about a school problem.	E	36.7	41.8	20.4	1.0		4.14	0.77	7.86	4	No
	J	39.4	40.9	15.7	3.9		4.16	0.83			
	S	26.6	55.2	15.6	2.6		4.06	0.73			

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*Response categories and weights: 5 = a great deal; 4 = very much; 3 = somewhat; 2 = very little; and 1 = not at all.

Table C-2 (continued)

Item		Per Cent of Principals Responding They Enjoy Activity*									
		5	4	3	2	1	$\overline{X}$	S.D.	Chi Square	Degrees of Freedom	Sig. at Below .05 Level
7. Working primarily with teachers, rather than with pupils.	E	7.4	29.5	51.6	8.4	3.2	3.29	0.85	7.46	6	No
	J	10.3	37.3	37.3	14.3	0.8	3.42	0.89			
	S	4.6	37.3	45.1	12.4	0.7					
8. Working with "exceptionally able" teachers.	E	51.5	35.1	13.4			4.38	0.71	3.25	4	No
	J	50.0	43.0	7.0			4.43	0.62			
	S	51.6	38.1	10.3			4.41	0.67			
9. Working with "average" teachers.	E	14.3	56.1	27.6	2.0		3.83	0.69	5.67	4	No
	J	24.8	55.0	19.4	0.8		4.04	0.69			
	S	20.6	51.6	27.1	0.6		3.92	0.71			
10. Working with new teachers.	E	40.2	40.2	19.6			4.21	0.75	13.27	4	Yes
	J	52.7	38.8	8.5			4.44	0.65			
	S	47.1	46.4	6.5			4.41	0.61			
11. Working with youngsters who are having a hard time adjusting to a school situation.	E	27.6	45.9	25.5	1.0		4.00	0.76	4.64	4	No
	J	37.2	37.2	22.5	3.1		4.09	0.85			
	S	26.8	47.1	21.6	4.6		3.96	0.82			
12. Having a vacation from work periodically during the school year.	E	47.4	32.6	18.9	1.1		4.26	0.80	0.55	4	No
	J	46.1	35.2	16.4	1.6	0.8	4.24	0.84			
	S	44.1	37.2	15.2	3.4		4.22	0.83			

*Response categories and weights: 5 = a great deal; 4 = very much; 3 = somewhat; 2 = very little; and 1 = not at all.

Table C-2 (continued)

Per Cent of Principals Responding
They Enjoy Activity*

Item		5	4	3	2	1	$\bar{X}$	S.D.	Chi Square	Degrees of Freedom	Sig. at Below .05 Level
13. Conducting teachers' meetings.	E	15.3	43.9	35.7	5.1		3.69	0.79	4.79	6	No
	J	17.8	45.7	31.0	4.7	0.8	3.75	0.83			
	S	13.5	54.8	25.8	5.2	0.6	3.75	0.78			
14. Evaluating teacher performance.	E	4.1	25.5	40.8	25.5	4.1	3.00	0.92	17.98	6	Yes
	J	14.0	29.5	34.1	17.1	5.4	3.29	1.08			
	S	5.2	35.5	43.2	11.6	4.5	3.25	0.89			
15. Having the freedom to schedule one's own time.	E	36.1	47.4	16.5			4.20	0.70	2.49	4	No
	J	42.5	42.5	14.2	0.8		4.27	0.73			
	S	35.9	51.0	10.5	2.6		4.20	0.73			
16. Working with community agencies.	E	18.4	38.8	35.7	7.1		3.68	0.86	2.54	6	No
	J	24.2	35.2	32.8	7.8		3.76	0.91			
	S	18.2	41.6	33.8	5.8	0.6	3.71	0.86			
17. Handling public relations.	E	33.3	42.7	19.8	3.1	1.0	4.04	0.87	7.07	6	No
	J	31.5	31.5	30.7	6.3		3.88	0.93			
	S	27.3	34.4	30.5	7.1	0.6	3.81	0.94			
18. Supervising custodial personnel.	E	3.3	22.0	47.3	23.1	4.4	2.97	0.87	3.51	6	No
	J	6.7	20.0	44.2	24.2	5.0	2.99	0.96			
	S	4.7	17.3	53.5	21.3	3.1	2.99	0.84			

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*Response categories and weights: 5 = a great deal; 4 = very much; 3 = somewhat; 2 = very little; and 1 = not at all.

Table C-2 (continued)

	Item		Per Cent of Principals Reponding They Enjoy Activity*									
			5	4	3	2	1	$\overline{X}$	S.D.	Chi Square	Degrees of Freedom	Sig. at Below .05 Level
19.	Supervising office personnel.	E	11.1	37.8	43.3	5.6	2.2	3.50	0.85	3.74	6	No
		J	9.3	37.2	45.0	8.5		3.47	0.78			
		S	5.8	37.4	44.5	12.3		3.37	0.77			
20.	Supervising large groups of students.	E	12.6	47.4	28.4	9.5	2.1	3.59	0.91	7.58	6	No
		J	21.9	39.1	32.0	7.0		3.76	0.88			
		S	17.3	36.0	38.0	7.3	1.3	3.61	0.90			
21.	Having to reprimand teachers.	E			3.1	30.9	66.0	1.37	0.55	5.85	4	No
		J	1.6	0.8	3.9	36.2	57.5	1.53	0.75			
		S	0.6		6.5	41.6	51.3	1.57	0.68			
22.	Having to discipline pupils.	E	1.0		14.3	49.0	35.7	1.82	0.75	5.96	4	No
		J	1.6	2.3	22.7	44.5	28.9	2.02	0.87			
		S		4.6	19.7	50.7	25.0	2.04	0.80			
23.	Preparing staff bulletins or announcements.	E	6.1	21.4	51.0	15.3	6.1	3.06	0.93	7.52	6	No
		J	5.5	32.3	48.0	13.4	0.8	3.28	0.80			
		S	3.2	25.2	47.7	21.3	2.6	3.05	0.84			
24.	Working with guidance personnel.	E	19.0	53.6	26.2	1.2		3.90	0.70	15.06	4	Yes
		J	40.3	48.1	10.9	0.8		4.28	0.68			
		S	29.9	52.6	16.2	1.3		4.11	0.71			

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*Response categories and weights: 5 = a great deal; 4 = very much; 3 = somewhat; 2 = very little; and 1 = not at all.

Table C-2 (continued)

Item			Per Cent of Principals Responding They Enjoy Activity*				X̄	S.D.	Chi Square	Degrees of Freedom	Sig. at Below .05 Level
		5	4	3	2	1					
25. Working with curriculum specialists.	E	21.3	45.7	27.7	5.3		3.83	0.82	10.81	6	No
	J	32.6	45.0	19.4	3.1		4.07	0.80			
	S	17.8	53.3	23.0	4.6	1.3	3.82	0.83			
26. Preparing reports to the higher administration.	E	3.1	19.6	40.2	33.0	4.1	2.85	0.89	13.88	8	No
	J	8.5	22.5	47.3	18.6	3.1	3.15	0.93			
	S	2.6	23.9	44.5	22.6	6.5	2.94	0.91			

*Response categories and weights: 5 = a great deal; 4 = very much; 3 = somewhat; 2 = very little; and 1 = not at all.